FX-056VP/176VP

Maintenance Manual

2001-07-19 Rev.1a

Oki Data Corporation

Document Revision History

Title: FX-056VP/176VP Maintenance Manual

Revision Number	Revision Date	Item	Comments	Charge Author
1	2001-07-19		ISSUE	H. Endo

PREFACE

This manual is intended to be used for installing and maintaining FX-056VP/176VP facsimile transceiver.

Maintenance of the FX-056VP/176VP is assumed to be conducted at the following levels:

- Assembly-level maintenance for mechanical portions
- Unit-level maintenance for electrical at portions

CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED.
REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS
and
ATTENTION: IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERIE. REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MEME TYPE OU D'UNT TYPE RECOMMANDE PAR LE CONSTRUCTEUR. METTRE AU REBUT LES BATTERIES USAGEES CONFORMEMENT AUX INSTRUCTIONS DU FABRICANT.

Programming procedures of the following user's functions are not described in this maintenance manual.
Please refer to user's guide.

- Using One-Touch Keys for Programming
- Speed Dial Numbers
- Group Dialling
- Programming Personal (Confidential) Mailboxes
- Memory Operation

© Copyright 2001 Oki Data Corporation
This manual is subject to alteration without prior notification.

Contents

1. GENERAL INFORMATION 10

1.1 General Performance 10
1.2 General User's Functions 13
1.3 General Maintenance Functions 16
1.4 General Appearance 18
1.5 Basic Performance Specifications 20
1.6 Reports and Lists 31
1.6.1 Configuration Report (List of Setting) 31
1.6.1.1 Difference From FX-056e/176e 32
1.6.1.2 Report Image 33
1.6.2 Function List 36
1.6.2.1 Difference from FX-056e/176e 36
1.6.2.2 Report Image 37
1.6.3 Help Report 40
1.6.3.1 Report Image (Conditions for descriptions) 40
1.6.4 Telephone Directory 41
1.6.4.1 Difference from FX-056e/176e 41
1.6.5 Group Directory 63
1.6.5.1 Difference from FX-056e/176e 63
1.6.6 Self Diagnosis Report 70
1.6.6.1 Difference from FX-056e/176e 70
1.6.6.2 Report Image 71
1.6.7 G3 Protocol Dump 72
1.6.7.1 Difference from FX-056e/176e 72
1.6.8 G4 Protocol Dump 75
1.6.9 Relay Broadcast Confirmation 78
1.6.10 Internet Fax Reception Error Report (Error Mail Report) 82
1.6.11 Activity Report 83
1.6.11.1 Difference from FX-056e/176e 83
1.6.12 Message Confirmation 85
1.6.12.1 Difference from FX-056e/176e 85
1.6.13 Power Outage Report 88
1.6.13.1 Difference from FX-056e/176e 88
1.6.14 Confidential RX Report 90
1.6.14.1 Difference from FX-056e/176e 90
1.6.15 Active Memory File 92
1.6.15.1 Difference from FX-056e/176e 92
1.6.16 Broadcast Entry Report 96
1.6.16.1 Difference from FX-056e/176e 96
1.6.17 Broadcast Confirmation Report 104
1.6.18 Relay Broadcast Entry Report 104
1.6.19 G3 Log Report 104
1.6.20 NIC Configuration 105
1.6.20.1 NIC Configuration (TYPE 1 OEL) 105
1.6.20.2 NIC Configuration (TYPE 1 ODA) 106
1.6.20.3 NIC Configuration (TYPE 2 OEL) 108
1.6.20.4 NIC Configuration (TYPE 2 ODA) 110
1.6.21 NIC TEST PRINT 112
1.6.21.1 NIC TEST PRINT (TYPE 1 OEL) 112
1.6.21.2 NIC TEST PRINT (TYPE 1 ODA) 114
1.6.21.3 NIC TEST PRINT (TYPE 2 OEL) 116
1.6.21.4 NIC TEST PRINT (TYPE 2 ODA) 118
1.6.22 E-mail Maintenance Report 120
1.6.23 Personal Box List 121
1.6.24 Relay Broadcast Entry Report 122
1.6.25 Descriptions of Communication Mode Column 125
1.6.25.1 Mode Column in Activity Report 125

1.6.25.2 Mode Column in MCF-multi Report (with/without pictures) 125
1.6.26 Output Conditions of Various MCF Reports During Transmission 126
1.6.26.1 Difference from FX-056e/176e 126
1.6.26.2 Reports to be output when queuing for communication is cancelled ... 126
1.6.26.3 Reports to be output upon canceling communication by pressing STOP Key 127
1.6.26.4 Reports to be output upon the communication error end 127
1.6.26.5 Reports to be output when the communication is completed normally. 128

2. INSTALLATION PROCEDURE 129
A. Setup Information 129

2.1 General 129
2.2 Site Selection 131
2.3 Unpacking 133
2.4 Contents Identification 135
2.5 Installation of Attachments 136
2.6 AC Cord Connection 139
2.7 Telephone and Line Connection 140
2.8 Packing for Shipment 140

B. Programming and Initial Settings 141

2.9 Initial Settings 141
2.9.1 General Procedure of Key Operation 141
2.9.2 Technical Functions: Setup 147
2.9.2.1 Technical Functions Operation 1 148
2.9.2.2 Technical Functions Operation 2 149
2.9.2.2.1 T1 (TX) Timer Value 157
2.9.2.2.2 T1 (RX) Timer Value 158
2.9.2.2.3 T2 Timer *100ms 159
2.9.2.2.4 Error Criterion 160
2.9.2.2.5 Attenuator 160
2.9.2.2.6 T/F Tone Att. 161
2.9.2.2.7 MF Att. 161
2.9.2.2.8 Ring Dura. *10ms 162
2.9.2.2.9 CML Timing *100ms 162
2.9.2.2.10 LED Headstrobe 163
2.9.2.2.11 ADMIN Email Addr. 164
2.9.2.3 Technical Functions (Setup) 165
2.9.2.4 TEL/FAX automatic switching 177
2.9.2.5 TAD mode 179
2.9.2.6 Outline of Parallel Pick Up 181
2.9.3 User's Functions 183
2.9.4 Location Program 185
2.9.4.1 Select Menu is shown as below: 185
2.9.5 Setup 193
2.9.5.1 Clock Adjustment 195
2.9.5.2 ID/Password Programming: 196
2.9.5.2.1 TSI/CSI 198
2.9.5.2.2 TSI/CSI Option 199
2.9.5.2.3 Sender ID 200
2.9.5.2.4 ISDN Tid 201
2.9.5.2.5 ISDN Sub No. 203
2.9.5.3 Machine Settings 208
2.9.5.3.1 Auto Answer Mode 213
2.9.5.3.2 TX Mode Default 214
2.9.5.3.3 BACKUP FILE TX 215
2.9.5.4 DIAL OPTIONS 222
2.9.5.4.1 Redial Tries 225

2.9.5.4.2 Redial Interval 226
2.9.5.4.3 Dial Prefix 227
2.9.5.5 Incoming Options 231
2.9.5.5.1 CNG Count 234
2.9.5.5.2 Distinctive Ring 235
2.9.5.6 Report Options 239
2.9.5.7 LAN Options 241
2.9.5.7.1 POP Interval 245
2.9.5.7.2 DOMAIN Name 246
2.9.5.7.3 POP GW Setting 247
2.9.5.7.4 Network Settings 248
2.9.5.7.4.1 IP Address 250
2.9.5.7.4.2 Subnet Mask 252
2.9.5.7.4.3 Default Gateway 253
2.9.5.7.4.4 SMTP Server Name 254
2.9.5.7.4.5 POP Server Name 255
2.9.5.7.4.6 POP User ID 256
2.9.5.7.4.7 POP Password 257
2.9.5.7.4.8 DNS P.SRV Addr. 258
2.9.5.7.4.9 DNS S.SRV Addr. 259
2.9.5.7.4.10 Host Name 260
2.9.5.7.4.11 Fax Email Addr. 261
2.9.6 User Default Setting 1 268
2.9.7 Default Setting of Dial Parameters 270
2.9.8 Technical Default Setting 271
2.9.9 Off-line Tests 273
2.9.9.1 Self Diagnosis Flow 274
2.9.9.2 Self Diagnosis Report 276
2.9.9.2.1 Difference from FX-056e/176e 276
2.9.10 On-line Tests 277
2.10 Installation of optional units 280
2.10.1 Optional units 280
2.10.2 Memory Board Installation Instruction 281
2.10.3 Network Card Installation Instruction 283
2.10.4 G4 Board Installation Instruction 284
2.10.5 G3 Dual Line Installation Instraction 285
2.10.6 Second Paper Cassette Unit 286

3. BRIEF TECHNICAL DESCRIPTION 289

3.1 Fundamentals of the Electro-Photographic Process 290
3.2 Actual Electo-photographic Process 292
3.3 Boards and Units 293
3.4 Overall Dimension and Mechanical Structure of FX-056VP/176VP 294

4. MECHANICAL DISASSEMBLY AND REASSEMBLY 296

4.1 Precautions for Parts Replacement 296
4.2 Tools 298
4.3 How to Disassemble and Reassemble 298
4.3.1 Document Table Cover 301
4.3.2 Rear Cover and NCU Cover 301
4.3.3 Main Cover 302
4.3.4 Operation Unit 304
4.3.5 NCU Board 305
4.3.6 MODEM Board 305
4.3.7 Plate Package 306
4.3.8 Scanner Unit (CIS) 307
4.3.9 Stacker Frame 308
4.3.10 Printer Unit 308

4.3.11 Fan and Fan guard 309
4.3.12 Main Board 310
4.3.13 Contact Assembly and High-/Low-voltage Power Supply Boards 310
4.3.14 Disassembling the Operation Unit 311
4.3.14.1 Disassembling the Operation Unit 313
4.3.15 Disassembling the Scanner Unit (L) 314
4.3.16 Scanner (CIS) 315
4.3.17 PC1/PC2 Sensors 315
4.3.18 Speaker 316
4.3.19 Scanner Motor 317
4.3.20 Disassembling the Printer Unit 318
4.3.21 LED Head 319
4.3.22 ID/Toner Lockout Board 320
4.3.23 Stacker Cover 321
4.3.24 Fusing Unit 321
4.3.25 Manual Feed Assembly 321
4.3.26 Back-up Roller, Transfer Roller 322
4.3.27 Resist Roller, Hopping Roller, Sensor Plates 323
4.3.28 Eject Guide Assembly 324

5. ADJUSTMENTS 325

5.1 Setting of LED Print Head Drive Time 325
5.2.1 Confirmation Items 326
5.2.2 Measurement 327

6. CLEANING AND MAINTENANCE 328

6.1 Replacement of Consumable 328
6.2 Routine Inspection 330
6.3 Printer Counter Display/Clear 332
6.4 Printer Counter Display/Clear 334
6.5 Self-diagnosis Test 335
6.6 Sensor Calibration Test 341
6.7 LEDs Test 342
6.8 Tone Send Test 343
6.9 High-speed Modem Send Test 344
6.10 High-speed Modem Receive Test 345
6.11 MF Tone Send Test 346
6.12 Tone (TEL/FAX) 347
6.13 ISDN Sending Test 348
6.14 Tone Send Test G3 349
6.15 Modem Send Test G3 350
6.16 MF (Tone) Test G3 351
6.17 Protocol Dump Data Printing 352
6.18 System Reset 353
6.19 Service Codes 354
6.19.1 G3 Service Code List 355
6.19.2 G4 Service Code Lists 358
6.19.3 Internet-Fax Service Code List 361

7. TROUBLESHOOTING AND REPAIR FOR FX-056VP/176VP 362

7.1 Overall Troubleshooting Flow Chart 364
7.2 No LCD Operation 365
7.3 Alarm LED On 366
7.4 Printing Test Failure 367
7.5 No Local Copy 368
7.6 Auto Dial Failure 369

7.7 Transmission Problem 370
7.8 Auto Reception Failure 372
7.9 Reception Problem 373
7.10 Sensor Calibration Test 375
7.11 LED Test 376
7.12 Tone Send Test 377
7.13 High-speed Modem Test 378
7.14 MF Send Test 380
7.15 Tone (TEL/FAX) Send Test 381
7.16 No Acoustic Line Monitor 382
7.17 Power Supply Unit 383
7.18 No Document Feeding 384
7.19 Multiple Document Feeding 385
7.20 Document Skew 386
7.21 Document Jam 388
7.22 Printer Unit 389
7.22.1 Precautions 389
7.22.2 Troubleshooting Flow Charts of Printer Unit 390
7.23 G3 Dual Line Troubleshooting Flow Chart 410
7.24 Auto Dial Failure (G3 Dual Line) 411
7.25 Transmission Problem (G3 Dual Line) 412
7.26 Auto Reception Failure (G3 Dual Line) 414
7.27 Reception Problem (G3 Dual Line) 415
7.28 High-speed Modem Test (G3 Dual Line) 417
7.29 MF Send Test (G3 Dual Line) 419
7.30 No Acoustic Line Monitor (G3 Dual Line) 420

8 DIPSWITCHS SETTING TABLES 421

8.1 WN5 421
8.2 TB0 424

Appendix A PC BOARD DESCRIPTIONS AND OPERATION 427

Appendix B DESCRIPTIONS OF PRINT OPERATION 513

Appendix C CIRCUIT DIAGRAMS AND PARTS LIST 533

Appendix D MECHANICAL EXPANDED VIEW DRAWING AND PARTS LIST ... 688

Appendix E BOARD LAYOUT FX-056VP/176VP 704

Appendix F SECOND PAPER FEEDER MAINTENANCE MANUAL 731

Appendix G PC-LOADING 750

Appendix H RMCS SYSTEM MANUAL (FOR MODEL 40) 765

Appendix I TROUBLESHOOTING MANUAL 773

Appendix J INTERNET FAX & NETWORK PRINT / NETWORK SCANNER KIT 862

Appendix K 922

1. GENERAL INFORMATION

1.1 General Performance

(1) Type of appearance
- Desktop type

(2) Applicable lines
- PSTN (Public switched telephone network)
- PBX (Private branch exchange) telephone line
- ISDN (Integrated service digital network)
- FAX2NET Internet Fax (via PSTN)
- E-mail Internet Fax (via LAN)

Note: ISDN and Internet Fax are option.

(3) Compatibility
- ITU-T Group 3 facsimile transceiver
- ITU-T Group 4 facsimile transceiver (option)

(4) Document width
- Max. 216 mm (NA Letter)
- Min. 148 mm (ISO A5 size)

(5) Effective reading width

TX
- 215.4 mm (NA Letter)
- 208.6 mm (ISO A4 size)

COPY
- 208.6 mm (NA Letter)
- 208.6 mm (ISO A4 size)*1

* Printing width will be 206 mm.

(6) Scanning length
- 128 mm to 356 mm

Length setting: Long documents (1500 mm) are also available.

(7) Automatic document feeder (ADF)
- 50 sheets (NA Letter/A4-size: 20-lb/75gm Oki Data recommended paper)
- 30 sheets (NA Letter/A4-size: 16 to 28-lb/60 to 105gm)

(8) Recording paper
- 1st cassette: NA Letter/NA Legal/A4-size plain paper cut 250 sheets capacity (20-lb/75gm)
- 2nd cassette (option): NA Letter/NA Legal/A4-size plain paper cut 500 sheets capacity (20-lb/75gm)
- Manual paper feeder: Transparency for overhead projector, applicable.
  Sheet size: NA Letter/NA Legal/A4-size
  *: Oki Data recommended paper

(9) Printable width
- NA Letter: 211.3 mm (203.2 mm for assured quality)
- NA Legal: 211.3 mm (203.2 mm for assured quality)
- ISO A4: 206.0 mm (197.3 mm for assured quality)

(10) Printable length
- NA Letter: 273.4 mm (266.7 mm for assured quality)
- NA Legal: 349.6 mm (342.9 mm for assured quality)
- ISO A4: 291.0 mm (284.3 mm for assured quality)

(11) Copy stacker
- Face down stacking: Max. 200* sheets
- Face up stacking: Max. 10* sheets

**Note 1: Oki Data recommended paper*
Note 2: Face down or face up stacking is changeable by the lever.

(12) Scanning resolution

a) Horizontal:

• 300 dot per inch

Note: 600 dpi x 15.4 mm (600 dpi x 600 dpi); copy is available.*

* In case 8 MB option memory is installed.

b) Vertical:

• 300 dot per inch, 15.4, 7.7, and 3.85 lines per mm

Note: 300 dpi x 300 dpi (600 dpi x 600 dpi); Transmission is available.*

* In case 8 MB option memory is installed.

(13) Scanning method

• 2592 bits contact image sensor

(14) Recording resolution

a) Horizontal:

• 600 dot per inch

b) Vertical:

• Variable:

	A4	Letter
STD	3.85 ~ 4.96	3.85 ~ 5.28
Fine	7.7 ~ 9.93	7.7 ~ 10.57
Ex-Fine (15.4 line/mm)	15.4 ~ 19.87	15.4 ~ 21.15
Ex-Fine (300 dot/inch)	300 ~ 387	300 ~ 412
Ex-Fine (600 dot/inch)	600 ~ 774	600 ~ 824

• Fixed EX-FINE mode : 600 dot/inch, 300 dot/inch, 15.4 line/mm
FINE mode : 7.7 line/mm
STD mode : 3.85 line/mm
PC-Print : 600 dot/inch, 300 dot/inch

(15) Printing method

Electro photographic printing

• 211.3 mm (4992 bits) LED print head

(16) Minumum scan line time for reception

• When receiving from Oki Data facsimile or ECM: 0 ms
• When receiving from non Oki Data facsimile and non ECM: 10 ms at 3.85 line/mm
5 ms at 7.7 line/mm, 15.4 line/mm

(17) Print speed

• Max. 10 sheets per minute (at NA letter size)

(18) Coding scheme

• Modified Huffman (MH)
• Modified Read (MR)
• Modified Modified Read (MMR)
• JBIG (only for FX-176VP)

(19) Modem

• ITU-T Rec. V.29: 9600bps for use on point-to-point 4-wire leased telephone type circuit.
• ITU-T Rec. V.27 ter: 4800bps modem for use in GSTN (General Switched Telephone Network)
• ITU-T Rec. V.21 channel 2: 300 bps duplex modem for GSTN
• ITU-T Rec. V.17: 2-wire modem for fax applications up to 14.4kbps
• ITU-T Rec. V.34

(20) Transmission speed
- 2.5 sec. per sheet of ITU-T No.1 evalution test chart (for FX-176VP)
- 3.0 sec. per sheet of ITU-T No.1 evalution test chart (for FX-056VP)

Note: This is Phase C at 3.85 line/mm and 33.6 kbps.

(21) Protocol
- ITU-T Rec. T.30
- ITU-T Rec. G4 Class 1 (option)
- OKI special protocols: High speed protocol (G3)

(22) Error correction scheme
- ITU-T ECM

(23) Image memory
- Basic model: 2.5 M-byte (FX-056VP)
  4.5 M-byte (FX-176VP)
- Optional memory: 2.0/4.0/8.0 M-byte

(24) Liquid crystal display (LCD)
- Four lines of 20 characters for operation guidance, check and various kinds of information

(25) Power source
- Normal input voltage 120 VAC for ODA version
- Normal input voltage 230 VAC for INT'L version

(26) MFP (Multi-Function Peripheral) PC Interface Kit
PC Printer function
PC Scanner function
PC Fax Modem function
Note: For details, see "Product Specification for MFP PC Interface Kit"
Hardware is standard and software is option for Bi-Centro interface.

(27) ISDN G4 Board function (option)
- G4 function
- ISDN G4: Communication
- ISDN G3: Communication
- ISDN: Report and List

Dual Mode Communication (option)
Note: For details, see "Product Specification for ISDN G4 Board (including Dual Mode Communication)"

(28) Network print kit (option)
- Netware 3.1x, 4.1x
- TCP/IP
- Windows NT/95/98/3.1
- T600dpi, 10ppm

Note: For details, see "Product Specification for Network Print Kit"

(29) Internet FAX Kit: E-mail type (option)
- I-Fax Sending
- I-FAX Receiving
- Gateway Service 1
- Gateway Service 2
- I-Fax Service

Note: For details, see" Product Specification for Internet FAX Kit".

(30) FAX2NET: Provider type (option) for 120V only
- Fax over IP
- Fax to E-mail
- Virtual E-mail
- Web Retrieval

Note: For details, see" Product Specification for FAX2NET Specification".

(31) G3 Dual Line Function (option)
Note: For details, see" Product Specification for G3 Dual Line Function".

(32) Network Adapter Kit (T.38) (option)
This realize the real-time Internet FAX based on ITU-T T.38 advice.
Note: For details, see" Product Specification for Network Adapter Kit (T.38)".

(33) 600dpi Communication (option)
Note: For details, see" Product Specification for 600dpi Communication".

(34) Relay Broadcast
Note: For details, see" Product Specification for Relay Broadcast".

1.2 General User's Functions

1) Transmission

(1) Transmit mode
- Automatic transmit mode
- Manual transmit mode

(2) Instant Dial

(3) Delayed feeder transmission

(4) Memory transmission
- 40 sessions

(5) Delayed memory transmission (within 3 days)
- 20 specified times for FX-056VP
- 30 specified times for FX-176VP

(6) Sequential broadcast (Memory)
- 210 stations for FX-056VP
- 250 stations for FX-176VP
  (In case Country Code = USA and also PnP = ODA or USA-Konica, then it is 160.)

(7) Delayed broadcast
- 20 specified times for FX-056VP
- 30 specified times for FX-176VP

(8) Confidential message transmission
- Feeder Confidential TX
- Memory Confidential TX
- Instant Dial

(9) Relay broadcast initiate
- Feeder Relay broadcast initiate
- Memory Relay broadcast initiate
- Instant Dial

(10) Polling transmission
- Feeder Polling TX
- Memory Polling TX

(11) Bulletin Poll transmission (When Box number is opened.)
• 16 boxes

(12) Batch transmission

(13) Priority transmission

(14) Transmission preparation (Feeder)

2) Reception

(1) Receive mode
• Automatic receive mode
• Manual receive mode
• TEL/FAX receive mode
• TAD mode
• Memory receive mode
• PC receive mode
• Forwarding mode

(2) Memory only reception

(3) No toner/No paper reception (memory)

(4) Confidential message reception
• 16 mail boxes

(5) Fax forwarding for incoming call

(6) Fax forwarding for no toner/no paper reception

(7) Polling reception

3) Convenience

(1) Dual access

(2) Automatic redial

(3) Last number redial (Manual redial)

(4) Local copy of a document, including multiple copies
• 99 copies max.

(5) Sender identification (Sender ID)

(6) Personal identification (Personal ID)

(7) TSI/CSI: Local telephone number

(8) Acoustic monitor (only TX mode)
• 5 level selectable

(9) Automatic alternate selecting call
(FAX No. + FAX No. can be registerd in one-touch keys).
• FX-056VP: Speed Dial (1 to 40) are assigned to one-touch keys.
• FX-176VP: Speed Dial (1 to 80) are assigned to one-touch keys.

(10) Half-tone transmission (at FINE resolution)
• 64 scale gradations

(11) Page re-transmission (Only when memory TX mode)

(12) Distinguishing text from pictures

(13) Vertical reduction printing (Reduction rate is from 100% to xx%)
Note: xx is Letter 72.8%, A4 77.5%

(14) Smoothing printing
In case of 8 dot/mm x 3.85 lines/mm → 300 dot/inch x 784 lines/inch

(15) Auto dialing
- Speed dialing:
  FX-056VP; 1 to 140 (1 to 40 are assigned to one-touch keys.)
  FX-176VP; 1 to 230 (1 to 80 are assigned to one-touch keys.)
- Group dialing; 20 groups
- Keypad dialing
- Chain dialing
- Mixed dialing

(16) Real-time dialing
Dialing with off hook condition or when the HOOK key is pressed.

(17) Automatic pause signal insertion

(18) Local copy

(19) Telephone directory (Alpha/Location) dialing

(20) TEL/FAX automatic switching

(21) TAD mode (for external telephone answering device)

(22) Session number

(23) Time and date printing

(23) Closed user group (Direct mail rejection)

(24) Contrast and resolution control

(25) Key touch tone

(26) Printer counter display (For drum, toner, print, and scan)

(27) Quick scanning

(28) Time and date setting

(29) Language selection
- 2 languages (LCD and Report)

(30) Distinctive ring detect

(31) Restricted access

(32) Beep sound

4) Reports

(1) Function list

(2) Configuration

(3) Phone directory

(4) Group directory

(5) Activity report

(6) Active memory files

(7) Broadcast MCF (Message Confirmation)

(8) Box Information

(9) Protocol dump (G3 and G4)

(10) NIC configuration

(11) Log. report (Service bit = ON)

(12) G4 Log. report (Service bit = ON)

(13) G3 Log. report (Service bit = ON)

(14) Self diagnosis report

5) Report options

(1) MCF. (Single-Loc.)

(2) MCF. (Multi-Loc.)

(3) Image in MCF.

(4) Error report (MCF.)

1.3 General Maintenance Functions

1) Local tests

(1) Self-diagnosis
Main board
- CPU ROM/RAM check
- Flash memory check (Program, Language, and Default)
- Modem version
- RAM check
- Toner cartridge
- Option memory check
- DEVICE ID
- LAN Board check (option)
- ISDN board (option)
- CPU ROM/RAM check

(2) Sensor calibration (Adjustment of scanning level)

(3) LED test

(4) Tone send test (When NCU board is installed.)

(5) High-speed modem send test (When NCU board is installed.)

(6) High-speed modem receive test (When NCU board is installed.)

(7) MF tone test (When NCU board is installed.)

(8) Tone (TEL/FAX) test (When NCU board is installed.)

(9) Loop back 1 (When ISDN option board is installed.)

(10) Loop back 2 (When ISDN option board is installed.)

(11) INFO0 sending (When ISDN option board is installed.)

(12) INFO1 sending (When ISDN option board is installed.)

(13) INFO2 sending (When ISDN option board is installed.)

(14) INFO3 sending (When ISDN option board is installed.)

(15) Pulse (1kHz) send (When ISDN option board is installed.)

(16) Pulse (2kHz) send (When ISDN option board is installed.)

(17) Pulse (N2kHz) send (When ISDN option board is installed.)

(18) Tone send test G3

(19) Modem send test G3

(20) MF (tone) test G3

2) Technical setup

3) System reset

- All data clear
- Location data clear
- Configuration data clear

4) Default type set

5) PC loading

6) G4 PC loading

7) G3 PC loading

1.4 General Appearance

Figure 1.4.1 shows the general appearance of the FX-056VP/176VP.

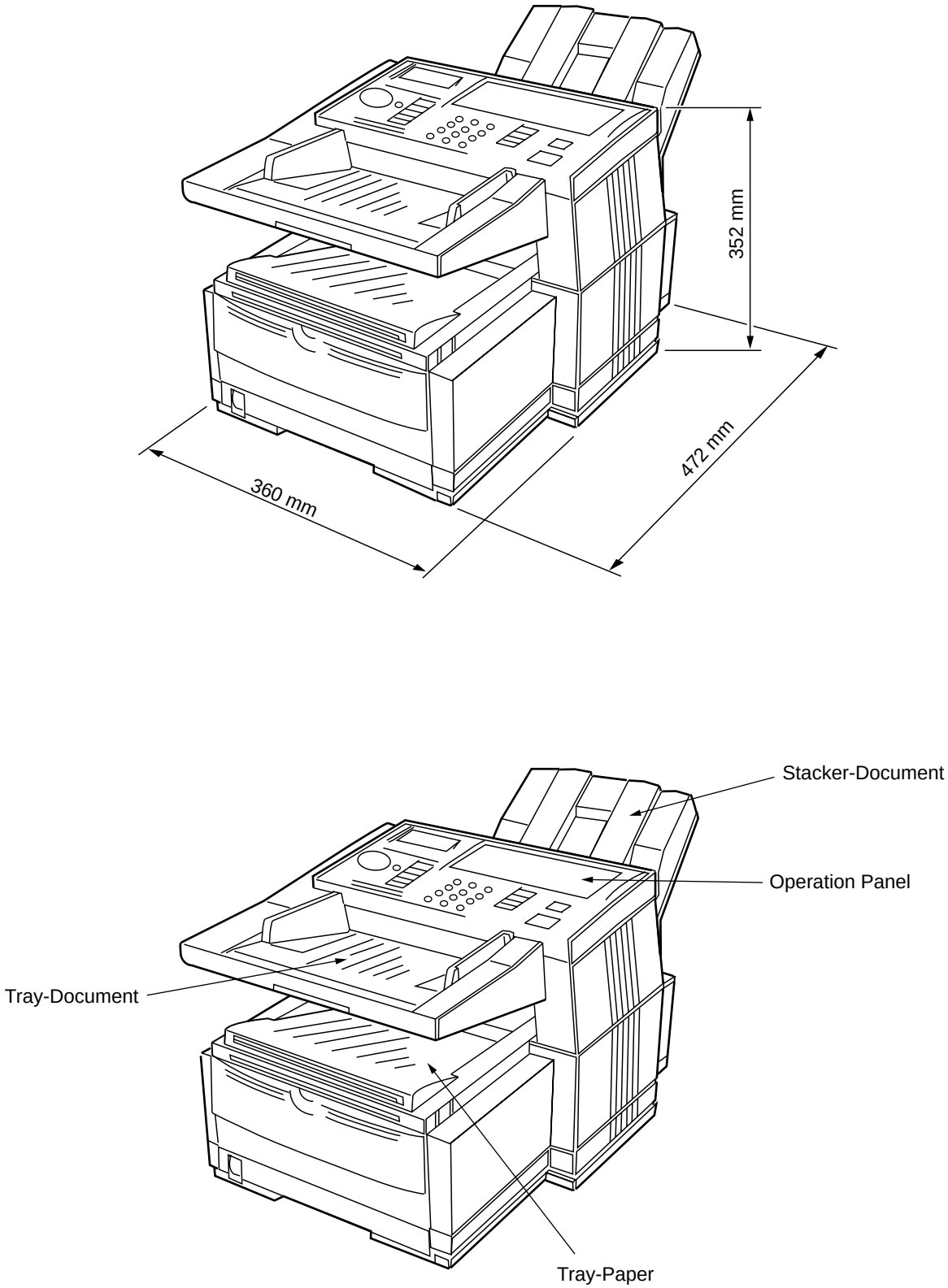


Figure 1.4.1 General Appearance of FX-056VP/176VP

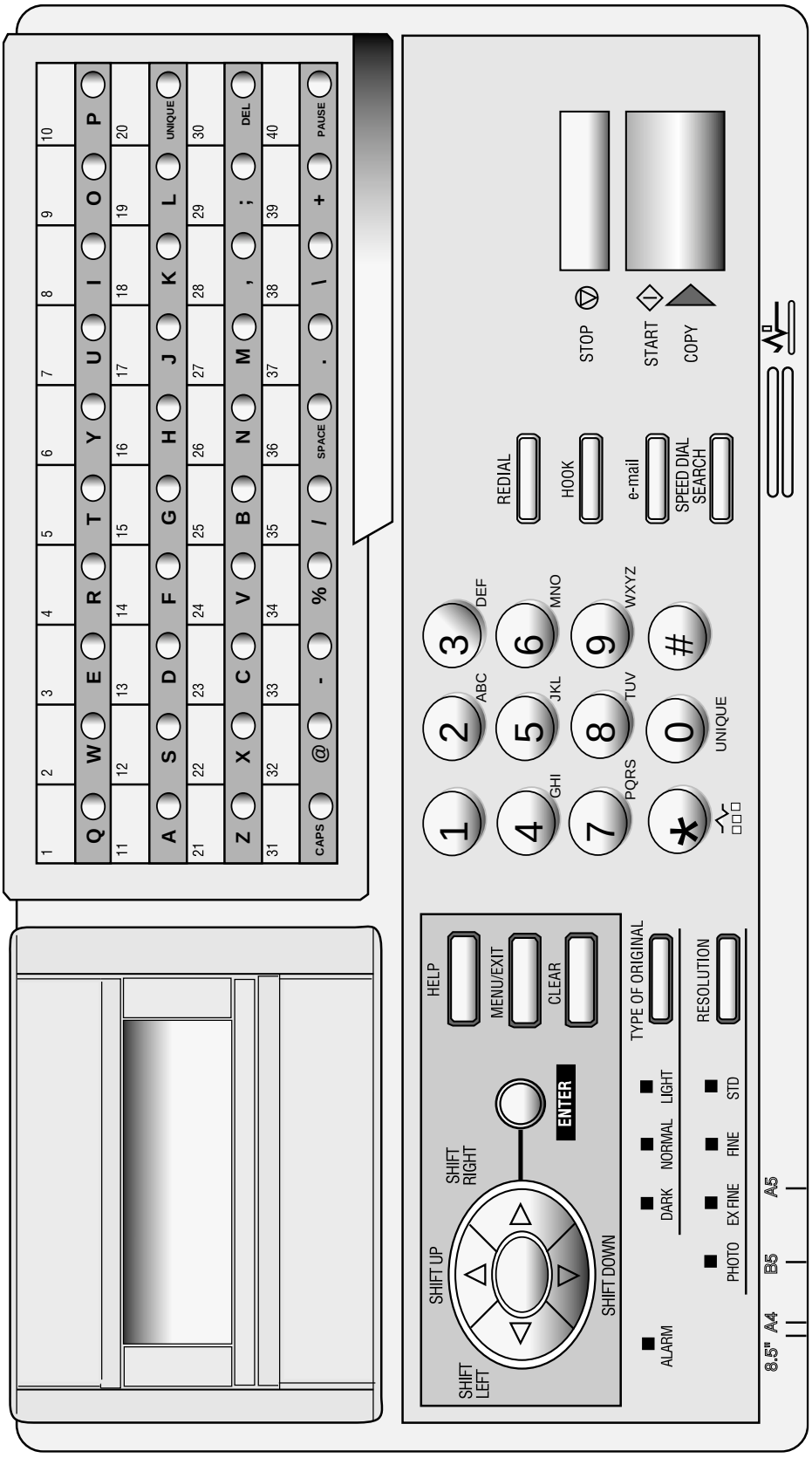


Figure 1.4.2 Control Panel of FX-056VP/176VP

1.5 Basic Performance Specifications

Table 1.5.1 shows basic performance specifications:

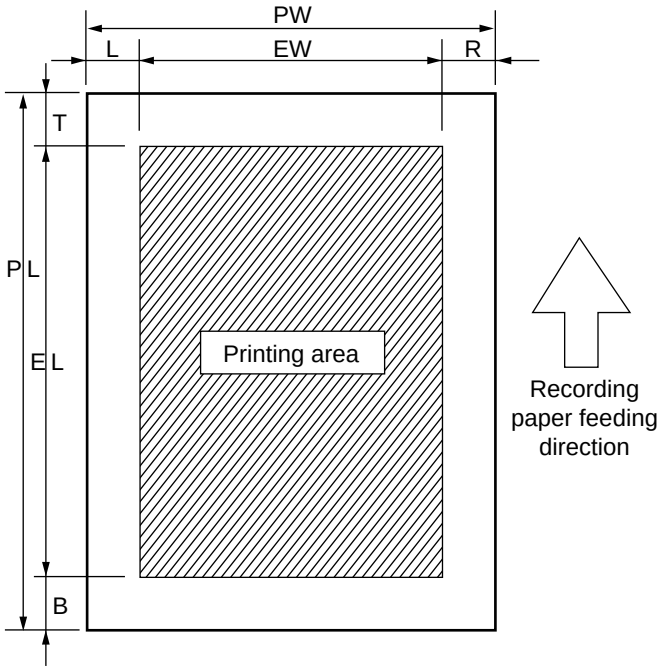
Table 1.5.1 Basic Performance Specifications

No.	Item	Specifications
1	Applicable line	1) PSTN (Public switched telephone network) 2) PBX (Private branch exchange) 3) ISDN (Integrated services digital network): Option 4) FAX2NET Internet Fax (via PSTN): Option 5) E-mail Internet Fax (via LAN)
2	Line interface 1) Impedance	600 ohm balanced *Note:* Impedance may differ by the requirement of PTT
	2) Sending power level	0 dBm to -15 dBm range (Adjustable in 1 dB steps: Technical Setup No.21)
	3) Receiving power level	0 dBm to -43 dBm (In case of V.34 TX/RX, -3 ~ -36 dBm)
3	Type of document to be transmitted 1) Width	Max. 216 mm (NA Letter) Min. 148 mm (ISO A5) *Note:* Effective reading width is NA Letter (215.4 mm)
	2) Length	Min. 128 mm (5 inch) Max. 356 mm (14 inch) Long document detection: 380 mm or 1500 mm (Technical Setup No. 10: To enables or disables the long document scanning.)
	3) Thickness	Based on common bond paper, 1) 0.08 to 0.13 mm for multiple page feeding 2) 0.06 to 0.15 mm for single page feeding
	4) Shape	Rectangular
	5) Opacity	Document allowing less than 40% of the scanner source light to pass through them.
4	Effective reading width	

Document Width	Communication mode/paper width	Copy size	Effective reading width
NA Letter (216 mm) US/CANADA	G3/A4	Letter	215.4 mm for TX 208.6 mm for local copy
ISO A4 (210 mm) INT'L	G3/A4	A4	208.6 mm for TX 208.6 mm for local copy (*1)

*Note (*1):* Printing width will be 206 mm.

No.	Item	Specifications
5	Automatic document feeder (ADF) capacity	Max. 50 documents: 20 lb/75gm NA Letter or A4 size paper Max. 30 documents: 16 to 28/60 lb to 105gm NA Letter or A4 size paper Document shall be placed facedown on ADF stacker.
6	Document skew	Max. 1.0 mm skew over any advance of 100 mm. The occurrence of skew exceeding 1 mm per 100 mm shall be 0.5% or less.
7	Document jam detection	1) Transmission will stop and a line disconection will occur when the end of the document is detected within 380 mm after scanning begins.(except if unlimited: Technical Setup No.10) 2) A jam will also be declared if the document does not reach the scanning position within about 5 seconds after the start of a document feed. *Note:* When a jam is detected during message transmission, the machine will stop, but its receiving capability will remain valid.
8	Document jam removal	Manual release
9	Document stacking	Documents up to 297 mm in length, which meet the basic weight and thickness specification, will exit on the stacker, and documents of Letter or A4-size will stack in sequence. The first sheet will be fed first in the feeder and will exit on the stacker with printing side down.
10	Recording paper	For the first or second recording paper cassette: 1) Type: Plain paper (Bond paper: Xerox 4200 type or equivalent) 2) Size: ISO A4: 210 mm x 297 mm NA Letter: 215.9 mm x 279.4 mm/8.5 inch x 11 inch NA Legal 14: 215.9 mm x 355.6 mm/8.5 inch x 14 inch NA Legal 13: 215.9 mm x 330.2 mm/8.5 inch x 13 inch 3) Weight: 16 lbs to 24 lb/60 to 105gm base weight Base weight is defind as the weight of 500 sheets of 431.8 mm (17 inch) by 558.8 mm (22 inch) or 1 sheet of size 1000mm by 1000mm. 4) Thickness: 0.08 mm to 0.13 mm 5) Condition: New paper For the manual paper feeder: 1) Type: Plain paper, colored paper, printed paper, envelope 2) Size: LA Letter/A4/NA Legal/Exective/A5/A6/etc. 3) Weight, thickness and condition: Same as above *Note:* One single sheet should be loaded on the manual paper feeder for one occation. For best results use Oki Data recommended papers 1) Xerox 4200 (20-lb/75gm base weight paper)

No.	Item	Specifications
11	Recording paper cassette First cassette	Up to 250 sheets/cassette (Oki Data recommended paper)
	Second cassette (option)	Up to 500 sheets/cassette (Oki Data recommended paper)
12	Effective recording paper	
	1) Printable area	Printable area

	Letter Size		A4 Size		14 inch Legal Size		13 inch Legal Size	
	inch	mm	inch	mm	inch	mm	inch	mm
PL	11	279.4	11.7	297	14	355.6	13	330.2
PW	8.5	216	8.27	210	8.5	216	8.5	216
EL	10.76	273.4	11.46	291	13.76	349.6	12.76	324.2
EW	8.32	211.3	8.11	206	8.32	211.3	8.32	211.3
T	0.12	3	0.12	3	0.12	3	0.12	3
B	0.12	3	0.12	3	0.12	3	0.12	3
L	0.09	2.3	0.08	2	0.09	2.3	0.09	2.3
R	0.09	2.3	0.08	2	0.09	2.3	0.09	2.3

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td></td><td>2) Guaranteed printing area</td><td>Guaranteed printing area
<table>
<tr><th></th><th colspan="2">Letter Size</th><th colspan="2">A4 Size</th><th colspan="2">14 inch Legal Size</th><th colspan="2">13 inch Legal Size</th></tr>
<tr><th></th><th>inch</th><th>mm</th><th>inch</th><th>mm</th><th>inch</th><th>mm</th><th>inch</th><th>mm</th></tr>
<tr><td>PL</td><td>11</td><td>279.4</td><td>11.7</td><td>297</td><td>14</td><td>355.6</td><td>13</td><td>330.2</td></tr>
<tr><td>PW</td><td>8.5</td><td>216</td><td>8.27</td><td>210</td><td>8.5</td><td>216</td><td>8.5</td><td>216</td></tr>
<tr><td>EL</td><td>10.5</td><td>266.7</td><td>11.2</td><td>284.3</td><td>13.5</td><td>342.9</td><td>12.5</td><td>317.5</td></tr>
<tr><td>EW</td><td>8.0</td><td>203.2</td><td>7.77</td><td>197.3</td><td>8.0</td><td>203.2</td><td>8.0</td><td>203.2</td></tr>
<tr><td>T</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td></tr>
<tr><td>B</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td></tr>
<tr><td>L</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td></tr>
<tr><td>R</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td><td>0.25</td><td>6.35</td></tr>
</table>
Note: The printable area means the area allowing actual printing at the time of receiving. The guaranteed printing area means the area where the printing quality is guaranteed.
These tables do not include vertical and horizontal addressing error (+/- 3 mm) of recording paper.</td></tr>
<tr><td>13</td><td>Copy stacking</td><td>The printed copies will be discharged on the stacker with printed face up or face down.
1) Face down stacking: Up to 200 copies *
2) Face up stacking: Up to 10 copies *
Note: 1) Using the recommended paper, New standard 20-lb.(Xerox 4200)
2) Except 16 lb papers.
3) Face down or face up stacking is changeable by the lever.</td></tr>
<tr><td>14</td><td>Scanning resolution</td><td>Horizontal:
• 600 dot/inch (interpolated) and 300 dot/inch
Note: 600 dpi x 15.4 mm Copy is available.

Vertical:
Transmission mode:
• 600 dot/inch, 300 dot/inch, 15.4 lines/mm (EX-FINE), 7.7 lines/mm (FINE) or 3.85 lines/mm (STD)</td></tr>
<tr><td>15</td><td>Scanning method</td><td>NA Letter size (2592-bits) direct contact image sensor</td></tr>
<tr><td>16</td><td>Contrast control</td><td>The Light and Dark contrasts (low contrast) will be automatically enhanced to improve image quality. Slice level shifting has 3 levels of switch selection on operation panel.</td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>17</td><td>Recording resolution</td><td>Horizontal
• 600 dot/inch

Vertical
• 300 dot/inch (EX-FINE), 15.4 line/mm (EX-FINE), 7.7 line/mm (FINE), or 3.85 line/mm (STD)

Variable:
<table>
<tr><th></th><th>A4</th><th>Letter</th></tr>
<tr><td>STD</td><td>3.85 ~ 4.96</td><td>3.85 ~ 5.28</td></tr>
<tr><td>Fine</td><td>7.7 ~ 9.93</td><td>7.7 ~ 10.57</td></tr>
<tr><td>Ex-Fine (15.4 line/mm)</td><td>15.4 ~ 19.87</td><td>15.4 ~ 21.15</td></tr>
<tr><td>Ex-Fine (300 dot/inch)</td><td>300 ~ 387</td><td>300 ~ 412</td></tr>
<tr><td>Ex-Fine (600 dot/inch)</td><td>600 ~ 774</td><td>600 ~ 824</td></tr>
</table></td></tr>
<tr><td>18</td><td>Copy resolution</td><td>• STD: 200 dot/inch x 3.85 line/mm
• FINE/PHOTO: 300 dot/inch x 300 dot/inch
• EX-FINE: 600 dot/inch x 15.4 line/mm, 600 dot/inch x 600 dot/inch*
* This function can be set only when 8 MB option memory board is installed and 600 DPI Function is set to ON (User setting).</td></tr>
<tr><td>19</td><td>Recording method</td><td>Electro-photographic printing
• 211.3 mm (4992 bits) LED print head</td></tr>
<tr><td>20</td><td>Recording paper skewing</td><td>Maximun allowable skew is + or - 1 mm over any advance of 100 mm.</td></tr>
<tr><td>21</td><td>Copy darkness</td><td>1) Black image: Greater than 1.2 OD *
2) White background (unprinted area): Not greater than 0.2 OD
Note: OD: (Optical density)</td></tr>
<tr><td>22</td><td>Copy uniformity</td><td>Printed copies will exhabit a uniform density of printed and background areas:
1) From edge to edge: 25%
2) From copy to the next copy: 30%</td></tr>
<tr><td>23</td><td>Recording paper running out</td><td>The fax can detect the no-paper condition by a photosensor.
When the paper has run out in the local copy operation, the scanning will stop with “PAPER JAM” on the LCD and an ALARM LED turn on without an alarm tone.
When the paper has run out while a message is being received and the no-paper reception is activated, the LCD display will show “MSG. IN MEMORY”, and the Alarm LED turn on.</td></tr>
<tr><td>24</td><td>Minimum scan line time for receiving</td><td>0 ms, when receiving in ECM mode of from an Oki Data facsimile.
5 ms at 15.4 line/mm or 7.7 line/mm and 10 ms at 3.85 line/mm when receiving from a non-Oki Data facsimile or non-ECM mode.</td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>25</td><td>Coding scheme</td><td>1) One-dimensional coding scheme:
Modified Huffman (MH)
2) Two-dimensional coding scheme:
Modified READ (MR)
Modified Modified READ (MMR)
3) JBIG (only for FX-176VP)</td></tr>
<tr><td>26</td><td>Modem operations</td><td>1) High-speed Modem
• ITU-T Rec. V.29 (9600/7200 bps)
• ITU-T Rec. V.27 ter (4800/2400 bps)
• ITU-T Rec. V.17 (14400/12000/9600/7200 bps)
• ITU-T Rec. V.33 (14400/12000 bps)
• ITU-T Rec. V.34 (33600/28800 bps)
2) Low-speed Modem
• ITU-T Rec. V.21 channel 2 (300 bps) or equivalent
3) JBIG:
Performs JBIG communication conforming to T.82/ T.85 of ITU-T Rec.
Note: Only for FX-176VP, and JBIG is not performed in G4 communication.
4) ISDN G4:
ITU-T Rec. T.563, T.521, T.503, T.62, T.6, T.70</td></tr>
<tr><td>27</td><td>Fallback</td><td>Automatic fallback will occur according to the following sequences by FTT, RTN or PPR.
<table><tr><th>Fall-Back Rank</th><th>Protocol</th><th>Transmission Speed (bps)</th><th>No. of Training</th><th>RTN receivied</th></tr><tr><td>1st</td><td>ITU-T V.17 (V.33)</td><td>14400</td><td>1</td><td>1</td></tr><tr><td>2nd</td><td>ITU-T V.17 (V.33)</td><td>12000</td><td>1</td><td>1</td></tr><tr><td>3rd</td><td>ITU-T V.17 (V.29)</td><td>9600</td><td>1</td><td>1</td></tr><tr><td>4th</td><td>ITU-T V.17 (V.29)</td><td>7200</td><td>1</td><td>1</td></tr><tr><td>5th</td><td>ITU-T V.27 ter.</td><td>4800</td><td>2</td><td>1</td></tr><tr><td>6th</td><td>ITU-T V.27 ter.</td><td>2400</td><td>2</td><td>1</td></tr></table>When the last trial fails, the transmitting station sends out a DCN signal to the remote station for disconnection.
Note: • Modem automatically performs the fall-back depending upon the line condition.
• V.34 fallback sequence:
The modem automatically selects transmission speed according to the line condition.</td></tr>
<tr><td>28</td><td>Protocol</td><td>1) ITU-T Rec. T.30
2) Oki special protocol (speed protocol)
The T.30 handshaking procedure will be conducted at message transmission speed instead of 300 baud, during transmission multi-page.
Note: In High-speed protocol, V.34 is not applied.
3) ITU-T G4 Class 1 (option)</td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>29</td><td>Image transmission time</td><td>2.5 seconds at 33.6 kbps with JBIG for FX-176VP and 3.0 seconds at 33.6 kbps for FX-056VP per sheet of ITU-T No.1 evaluation test chart.
Note: This speed denotes the time interval corresponding to Phase C (message transmission phase) as referred to in ITU-T T.30.
<table>
<tr><th colspan="2"></th><th>FX-056VP</th><th>FX-176VP</th></tr>
<tr><td rowspan="2">G3 Basic</td><td>Procedure Time</td><td>Initial 8.5 sec. (V34)
Intermediate 1.0 sec. (V34)
Final 1.0 sec. (V34)</td><td>Initial 8.5 sec. (V34)
Intermediate 1.0 sec. (V34)
Final 1.0 sec. (V34)</td></tr>
<tr><td>Image Time</td><td>33600 Standard 3.0 sec.
Fine 4.2 sec.</td><td>33600 Standard 2.5 sec.
Fine 3.5 sec.</td></tr>
</table>
Note: The above table shows the values under the following conditions:
• Sender ID: OFF
• High-speed protocol: OFF
• Transmission mode: Memory
• Resolution: STD</td></tr>
<tr><td>30</td><td>Error correction scheme (ECM)</td><td>ITU-T ECM defined in T4, T.30 are provided.</td></tr>
<tr><td>31</td><td>Communication mode</td><td>Half-duplex</td></tr>
<tr><td>32</td><td>Ringing signal detection sensitivity</td><td>1) Voltage range
• 25 to 150 V r.m.s.
Inoperative below 10V
Note: This range may differ by the requirement of PTT.

2) Frequency range
• 16 to 68 Hz
Note: This range may differ by the requirement of PTT.

3) Ring response time
• One-ringing signal or 5 sec, 10 sec, 15 sec, and 20 sec selectable</td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>33</td><td>Memory capacity (Image memory)</td><td>
<table>
<tr><th></th><th>Basic model</th><th>Optional memory</th></tr>
<tr><td>FX-056VP</td><td>2.5 M-byte</td><td>2/4/8 M-byte</td></tr>
<tr><td>FX-176VP</td><td>4.25 M-byte</td><td>2/4/8 M-byte</td></tr>
</table>
<table>
<tr><th rowspan="2"></th><th rowspan="2">Memory condition</th><th rowspan="2">FX-056VP [pages]</th><th colspan="2">FX-176VP</th></tr>
<tr><th>Print Priority=OFF</th><th>Print Priority=ON</th></tr>
<tr><td rowspan="4">With option board</td><td>Standard (without option)</td><td>200</td><td>353</td><td>340</td></tr>
<tr><td>2 M-byte</td><td>360</td><td>520</td><td>500</td></tr>
<tr><td>4 M-byte</td><td>520</td><td>680</td><td>660</td></tr>
<tr><td>8 M-byte</td><td>840</td><td>1000</td><td>980</td></tr>
</table>
Note1: ITU-T No.1 sample document is used to count the number of sheets.
Note2: Memory back-up time is 72 hours (tipical and Battery full charge condition) after the power off condition..
</td></tr>
<tr><td>34</td><td>Telephone handset (option)</td><td>General telephone function is available while the power is on.
Note: In the fax special versions, general telephone is available even when the power is off.</td></tr>
<tr><td>35</td><td>Overheat protection</td><td>The heater of the fuser unit is controlled within the predetermind temperature range by the thermistor. If the temperature of the heater exceeds the range, the LCD displays “PRINTER ALARM4”.
Furethermore, the built-in thermostat in the fuser unit prevents the heater from being overheated even in the event of the failures in the above temperature control circuit.</td></tr>
<tr><td>36</td><td>PC interface applications (option)</td><td>The following three modes are supported.
1) PC Printer function
2) PC Scanner function
3) PC FaxModem function
Note1: Hardware is standard and software is option for Bi-Centro interface.
Note2: For details, see Product Spec. “MFP PC Interface Kit”.</td></tr>
<tr><td>37</td><td>Network print kit (option)</td><td>• This function can be used for FX-056VP/176VP network printer service. The OkiHSP NIC (Network Interface Card) Ethernet Adapter used for FX-056VP/176VP is originally designed for the OkiPage printers and is intended to be forward compatible with (future) products utilizing an OkiHSP compatible interface.</td></tr>
</table>

No.	Item	Specifications
		• Installing the NIC card for FX-056VP/176VP provides Network print service as an option. 1) Network 3.1x, 4.1x 2) TCP/IP 3) Windows NT/95/98/3.1 4) T600dpi, 10 ppm *Note:* For details, see Product Spec. “Network Print Service”
38	Internet FAX Kit: E-mail type (option)	This function can be used when Option LAN board is installed. E-mail base (ITU-T T.37 simple mode) Internet-Fax uses a internet mail protocol the same as general mail client. - Internet-Fax convertes a scanning data to Tiff-f (Tagged Image File Format) and send it by using SMTP (Simple Mail Transfer Protocol) Protocol via JCI-NIC. - Internet-Fax accesses the Mail server in the interval by using POP3 (Post Office Protocol version 3) Protocol via JCI-NIC and get a E-mail with Tiff-file. (Interval time: 0 - 60 min.) The following functions are supported: • I-Fax Sending • I-Fax Receiving • Gateway Service 1 • Gateway Service 2 • I-Fax Service *Note:* For details, see Product Spec. “ Internet Fax Kit”.
39	ISDN G4 (option)	The follwing four modes are supported. 1) G4 function 2) ISDN G4 communication 3) ISDN G3 communication 4) ISDN Report and List *Note:* For details, see Product Spec. “ISDN G4 option system specifications”.
40	Dual Mode Communication (option)	This function enables the sumltaneous use of G4 and G3 protocols. *Note:* For details, see Product Spec. “ Dual Mode Communications”
41	G3 Dual Line Function (option)	Both 1st line and 2nd line (Dual line) can be connected to a same network type(PSTN/PBX). Communication for G3 Dual Line is enabled only memory TX/RX. *Note 1:* When the G3A option board is installed, other option board (G4A/JCI NIC board) cannot be used. *Note:* For details, see Product Spec. “G3 Dual Line Function”.

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>42</td><td>600DPI Communication</td><td>Resolution of 600dpi (transmissionreception, and copy) is made possible with 8-MB option memory mounted.
Note: For details, see Product Spec. “ 600dpi Communication”.</td></tr>
<tr><td>43</td><td>Relay Broadcast Function</td><td>• G4 communication supports Oki mode relay broadcast only.
• G3 communication supports both Oki mode relay broadcast and F code relay broadcast.
Note: For details, see Product Spec. “Relay Broadcast Function”.</td></tr>
<tr><td>44</td><td>FAX2NET: Provider type (option) for 120V only</td><td>The FAX2NET service is facsimile communication service using the four FAX2NET-supplied internet. Of the FAX2NET-supplied functions, the following functions are mounted in the FX-056VP/176VP.
• Fax over IP
• Fax to E-mail
• Virtual E-mail
• Web Retrieval
Note: For details, see Product Spec. “FAX2NET Specifications”.</td></tr>
<tr><td>45</td><td>Power supply unit and Power consumption of the machine</td><td>Power consumption of the machine (Typical power without optional board)
1) US/CANADA version
<table>
<tr><th>Mode</th><th>Typical power (W)</th></tr>
<tr><td>Transmit</td><td>25 W</td></tr>
<tr><td>Receive</td><td>325 W</td></tr>
<tr><td>Local copy</td><td>330 W</td></tr>
<tr><td>Standby</td><td>9.0 W</td></tr>
</table>
2) INT’L version
<table>
<tr><th>Mode</th><th>Typical power (W)</th></tr>
<tr><td>Transmit</td><td>25 W</td></tr>
<tr><td>Receive</td><td>325 W</td></tr>
<tr><td>Local copy</td><td>330 W</td></tr>
<tr><td>Standby</td><td>9.3 W (0.5 W)</td></tr>
</table>
Note: ( ): When power save mode is set to ON.
Chart: ITU-T No.1</td></tr>
</table>

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>46</td><td>Ambient condition</td><td></td></tr>
<tr><td></td><td colspan="2">Temperature and Humidity
<table>
<tr><th></th><th>In operation</th><th>Power off mode</th><th>During Storage</th><th>Unit</th></tr>
<tr><td>Temperature</td><td>50 - 90
(10 - 32)</td><td>32 - 110
(0 - 43)</td><td>14 - 110
(-10 - 43)</td><td>°F
(°C)</td></tr>
<tr><td>Humidity</td><td>20 - 80</td><td>10 - 90</td><td>10 -90</td><td>%RH</td></tr>
<tr><td>Maximum wet bulb temperature</td><td>77
(25)</td><td>80.4
(26.8)</td><td>———</td><td>°F
(°C)</td></tr>
<tr><td>Minimum difference between wet and dry bulb temperatures</td><td>35.6
(2)</td><td>35.6
(2)</td><td>———</td><td>°F
(°C)</td></tr>
</table>
1. Storage conditions specified above apply to the machine in packed condition.
2. Temperature and humidity must be in the range where no condensation occurs.</td></tr>
<tr><td>47</td><td>Dimension (Main body)</td><td>1) Width: Approx. 360 mm
2) Depth: Approx. 472 mm
3) Height: Approx. 352 mm</td></tr>
<tr><td>48</td><td>Weight (Main body)</td><td>Approx. 14 kg
Excluding recording paper and packing materials.</td></tr>
<tr><td>49</td><td>Attachment (to the main body)</td><td>1) AC power cord x 1
2) I/D unit x 1 (Already installed)
3) Toner cartrige x 1
4) Telephone line cord x 1
5) Document stacker x 1
6) One touch sheet x 1 (Already installed)
7) User’s guide x 1</td></tr>
</table>

1.6 Reports and Lists

This section presents the formats of reports and lists referred in the preceeding paragraphs, with some example for reference purpose for US/CANADA/INT'L version.
Brief descriptions for the items and sample data are given for the reader's convenience in understanding the meaning and purpose thereof, except for those which are seemed self explanatory.
The method of print out the reports and lists are in the Section 4.

1.6.1 Configuration Report (List of Setting)

Purpose:
To allows the user or serviceman to obtain a list of features and functions available with the machine, so that operator can rearrange the machine configuration for a most efficient operating enviroment with the machine.

Method:
The report will be manually printed out for maintenance purpose.

Description:

1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. User programmed function parameters
   - Machine Settings (No.10 to No.33)
   - Dialing Options (No.40 to No.52)
   - Incoming Options (No.60 to No.67)
   - Report Options (No.70 to No.73)
   - LAN Options (No.80 to No.98)
5. DOMAIN NAME
6. Telephone Number
7. Telephone Number (G3 OPTION)
8. Forwarding Number
9. Forward ON P-ERR
10. Relay Report No.
11. Server Telephone Number
12. Account Number
13. Prefix No. (No.1 to No.3)
14. ISDN_TID: Country code, ISDN No. and ISDN ID
15. ISDN_SUB Address
16. Technical Programmed Function Parameters: Technical Function Setup (No.01 to No.46)

1.6.1.1 Difference From FX-056e/176e

(*1 to *9 coincide with the notes on the example of the report image.)

*1 Changed the name of a setting item, RESTRICT ACCESS → DEPARTMENT CODE.
*2 Added the WIDTH REDUCTION (ON/OFF) setting.
*3 Added the BACKUP FILE TX (ON/OFF) setting.
*4 Changed the setting contents of POP INTERVAL, 0-60 MIN → OFF/1M/5M/10M/30M/60M/DAILY.
*5 Changed the name of a setting item, IFAX SENDER ID → SENDER ID (EMAIL).
*6 Changed the name of a setting item, MDN → RETURN RECEIPT.
*7 Added the setting items below:
<93> RECEIPT FORMAT (TEXT/MDN)
<94> SEND FILE FORMAT (TIFF/PDF)
<95> POP GW SUBJECT (within 20 letters)
<96> GW FORWARD TEXT (ON/OFF)
<97> SEND NOTIFICATION (ON/OFF)

*8 Added TWN to the COUNTRY CODE.
*9 Added the G3 RETRY SETUP (ON/OFF) setting.

1.6.1.2 Report Image

CONFIGURATION P1

07/01/2001 22:00
ID=ODC TAKASAKI

```
USER FUNCTION SETUP
        |
        |-- MACHINE SETTINGS
        |       < 10 > AUTO ANSWER MODE          FAX
        |       < 11 > MONITOR VOLUME            HIGH-MID.
        |       < 12 > BUZZER VOLUME             LOW
        |       < 13 > USER LANGUAGE             ENGLISH
        |       < 14 > REMOTE DIAGNOSIS          OFF
        |       < 15 > TX MODE DEFAULT           STD/NORMAL
        |       < 16 > NO TONER MEM. RX          OFF
        |       < 17 > MEM. FULL SAVE            OFF
        |       < 18 > INSTANT DIAL              ON
        |       < 19 > DEPARTMENT CODE           OFF                    *1
        |       < 20 > ECM FUNCTION              ON
        |       < 21 > CLOSED NETWORK            OFF
        |       < 22 > TONER SAVE                OFF
        |       < 23 > SENDER ID                 ON
        |       < 24 > WIDTH REDUCTION           OFF                    *2
        |       < 25 > 1'ST PAPER SIZE           LEETER
        |       < 26 > 2'ND PAPER SIZE           LETTER
        |       < 27 > POWER SAVE MODE           ON
        |       < 28 > RELAY PRINT               OFF
        |       < 29 > 600DPI FUNCTION           ON
        |       < 30 > ISDN DIAL MODE            G4 MODE
        |       < 31 > SPEECH RECEIVE            ON
        |       < 32 > OPTION LINE TYPE          ALL
        |       < 33 > BACKUP FILE TX            OFF                    *3
        |-- DIAL OPTIONS
        |       < 40 > REDIAL TRIES              3 TRIES
        |       < 41 > REDIAL INTERVAL           3 MIN
        |       < 42 > AUTO START                ON
        |       < 43 > DIAL TONE DETECT          OFF
        |       < 44 > BUSY TONE DETECT          ON
        |       < 45 > MF/DP                     MF
        |       < 46 > PULSE DIAL RATE           10 PPS
        |       < 47 > PULSE MAKE RATIO          39 %
        |       < 48 > PULSE DIAL TYPE           N
        |       < 49 > MF(TONE)DURATION          100 MS
        |       < 50 > PBX LINE                  OFF
        |       < 51 > FLS/EARTH/NORMAL          NORMAL
        |       < 52 > DIAL PREFIX               OFF
        |-- INCOMING OPTIONS
        |       < 60 > INCOMING RING             ON
        |       < 61 > REMOTE RECEIVE            OFF
        |       < 62 > T/F TIMER PRG.            35 SEC
        |       < 63 > CONTINUOUS TONE           OFF
        |       < 64 > PC/FAX SWITCH             ON
        |       < 65 > CNG COUNT                 1
        |       < 66 > RING RESPONSE             1 RING
        |       < 67 > DISTINCTIVE RING          OFF
```

(Page 1: When Service Bit = ON, and all description conditions are met.)

CONFIGURATION P2

```
                                                        07/01/2001   22:00
                                                        ID=ODC TAKASAKI

USER FUNCTION SETUP

        ├── REPORT OPTIONS
        │       < 70 > MCF. (SINGLE-LOC.)        OFF
        │       < 71 > MCF. (MULTI-LOC.)         ON
        │       < 72 > MESSAGE IN MCF.           OFF
        │       < 73 > ERR. REPORT (MCF.)        OFF
        ├── LAN OPTIONS
        │       < 80 > AUTO TRAY SW              OFF
                < 81 > PAPER SIZE CHECK          OFF
                < 82 > LAN PRINT T.O.            30 SEC
                < 83 > POP INTERVAL              DAILY [00:01][15:30][  :  ][  :  ]   *4
                < 84 > DELETE POP MSG.           TYPE2
                < 85 > TIME BETWEEN GMT          +5
                < 86 > TEXT PRINT                ON
                < 87 > HEADER PRINT              NON
                < 88 > CODING MODE               MH
                < 89 > EX.FINE MODE              300 DPI
                < 90 > SENDER ID(EMAIL)          OFF                       *5
                < 91 > DOMAIN NAME               THE FOLLOWING REFERENCE.
                < 92 > RETURN RECEIPT            ON                        *6
                < 93 > RECEIPT FORMAT            TEXT                      *7
                < 94 > SEND FILE FORMAT          PDF                       *7
                < 95 > POP GW SUBJECT                                      *7
                       >>> SUBJECT               Message From OKIDATA
                < 96 > GW FORWARD TEXT           OFF                       *7
                < 97 > SEND NOTIFICATION         OFF                       *7
                < 98 > NETWORK SETTINGS
                       >>> DSN                   ON

      DOMAIN NAME
      [taka.okidata.co.jp                                          ]
      [fax.okidata.co.jp                                           ]
      [                                                            ]
      [                                                            ]
      [                                                            ]

      TEL NO.                  = 6699
      TEL NO.(G3 OPTION)       = 6637
      FORWARDING NO.           = 326242116
      FORWARD ON P-ERR.        = 6992
      RELAY REPORT NO.         = 6411

      SERVER TEL NO.           = 0353417700
      ACCOUNT NO.              = 2160006612
      PREFIX NO.1              = 0041
             NO.2              =
             NO.3              = 0088

      ISDN-TID  COUNTRY CODE   = 081
                ISDN NO.       = 02732442117
                ISDN ID        = Okidata
      ISDN-SUB  ADDRESSING     = 123456
```

(Page 2: When Service Bit = ON, and all description conditions are met.)

CONFIGURATION P3

07/01/2001 22:00
ID=ODC TAKASAKI

TECHNICAL FUNCTION SETUP

< 01 >	SERVICE BIT	ON	
< 02 >	MONITOR CONT.	ON	
< 03 >	COUNTRY CODE	USA	*8
< 04 >	TIME/DATE PRINT	OFF	
< 05 >	TSI PRINT	ON	
< 06 >	TAD MODE	TYPE2	
< 07 >	REAL TIME DIAL	TYPE2	
< 08 >	TEL/FAX SWITCH	ON	
< 09 >	MDY/DMY	MDY	
< 10 >	LONG DOC. SCAN	OFF	
< 11 >	TONE FOR ECHO	OFF	
< 12 >	MH ONLY	OFF	
< 13 >	H/MODEM RATE	33.6 K	
< 14 >	T1(TX) TIMER VALUE	059	
< 15 >	T1(RX) TIMER VALUE	035	
< 16 >	T2 TIMER *100MS	130	
< 17 >	DIS BIT32	ON	
< 18 >	ERROR CRITERION	10 %	
< 19 >	OFF HOOK BYPASS	OFF	
< 20 >	NL EQUALIZER	0 DB	
< 21 >	ATTENUATOR	10 DB	
< 22 >	T/F TONE ATT.	10 DB	
< 23 >	MF ATT.	3 DB	
< 24 >	RING DURA. *10MS	12	
< 25 >	CML TIMING *100MS	03	
< 26 >	LED HEAD STROBE	10000	
< 27 >	MEDIA TYPE	MEDIUM	
< 28 >	TR LATCH CURRENT	0	
< 29 >	V34 TX RETRY	ON	
< 30 >	SYMBOL RATE	3429	
< 31 >	NSF SWITCH	ON	
< 32 >	ID/TSI PRIORITY	ID	
< 33 >	TONER COUNT CLEAR	OFF	
< 34 >	PARALLEL PICK UP	ON	
< 35 >	PRINT PRIORITY	OFF	
< 36 >	RELAY BROADCAST	ON	
< 37 >	FAX2NET FUNCTION	ON	
< 38 >	JBIG FACILITY	ON	
< 39 >	LLC CHECK	ON	
< 40 >	G3/G4 LEARNING	ON	
< 41 >	G3 SETUP BC		
< 42 >	G3 RETRY SETUP	OFF	*9
< 43 >	GATEWAY SERVICE	ON	
< 44 >	EMAIL MAINTENANCE	OFF	
< 45 >	ADMIN EMAIL ADDR.		
	[		]
< 46 >	COMMAND T.O.	5 sec	

(Page 3: When Service Bit = ON, and all description conditions are met.)

1.6.2 Function List

Method:
This list can be printed out manually from the report operation.
The list is printed out user function only and does not print technical function.

1.6.2.1 Difference from FX-056e/176e

(*1 to *10 coincide with the notes on the example of the report image.)

*1 Changed the INTERNET FAX wording to INTERNET RX and switched its order with POLLING TX/RX.
*2 Added the BOX INFORMATION setting.
*3 Changed the name of a setting item, RESTRICT ID → DEPARTMENT CODE.
*4 Changed the name of a setting item, RESTRICT ACCESS → DEPARTMENT ACCESS.
*5 Added the WIDTH REDUCTION (ON/OFF) setting.
*6 Added the BACKUP FILE TX (ON/OFF) setting.
*7 Changed the setting contents of POP INTERVAL, 0 - 60 M → OFF/1M/5M/10M/30M/60M/DAILY.
*8 Changed the name of a setting item, IFAX SENDER ID → SENDER ID (EMAIL).
*9 Changed the name of a setting item, MDN → RETURN RECEIPT.
*10 Added the setting items below:
<93> RECEIPT FORMAT (TEXT/MDN)
<94> SEND FILE FORMAT (TIFF/PDF)
<95> POP GW SUBJECT (within 20 letters)
<96> GW FORWARD TEXT (ON/OFF)
<97> SEND NOTIFICATION (ON/OFF)

1.6.2.2 Report Image

FUNCTION LIST P1

07/01/2001 22:00
ID=0dc Takasaki

TO ACCESS PROGRAM MENU ITEMS:
-PRESS THE MENU KEY
-TO LOCATE A MENU ITEM, USE THE UP-DOWN ARROW KEY
-SELECT THE MENU ITEM USING EITHER THE ENTER OR RIGHT ARROW KEYS

TO QUICKLY ACCESS A SPECIFIC "SETUP" ITEM:
-PRESS THE MENU KEY
-ENTER THE TWO-DIGIT NUMBER OF THE SETUP ITEM ON THE TEN KEY PAD

MENU
- DELAYED TX
- DELAYED BATCH TX
- PRIORITY TX
- CONFIDENTIAL TX
- RELAY INITIATE TX
- POLLING TX/RX
- INTERNET RX *1
- FAX2NET SERVICE
- PRINT FROM MEMORY
  - PRINT MEMORY MSG.
  - PRINT PERSONAL BOX
  - PRINT MEMORY POLL
- REPORT PRINT
  - ACTIVITY REPORT
  - ACTIVE MEM. FILES
  - BROADCAST MCF.
  - PHONE DIRECTORY
  - GROUP DIRECTORY
  - CONFIGURATION
  - FUNCTION LIST
  - BOX INFORMATION *2
  - PROTOCOL DUMP
  - NIC CONFIGURATION
  - NIC TEST PRINT
  - LOG. REPORT
  - G4 LOG. REPORT
  - G3 LOG. REPORT
- LOCATION PROGRAM
  - SPEED DIAL
  - GROUP
  - BATCH TX TIME
  - FORWARDING NO.
  - FORWARD ON P-ERR.
  - RELAY REPORT NO.
  - FAX NETWORK PRG.

Function List (page 1)

FUNCTION LIST P2

```
                                                07/01/2001   22:00
                                                ID=0dc Takasaki

MENU
  ├─ SETUP
       ├─ CLOCK ADJUSTMENT
       │        < 00 >  CLOCK ADJUTMENT
       │      ID/PASSWORD PRG.
       │        < 01 >  TSI/CSI
       │        < 02 >  TSI/CSI(G3 OPTION)
       │        < 03 >  SENDER ID
       │        < 04 >  PERSONAL BOX
       │        < 05 >  MEM. PASSWORD
       │        < 06 >  DEPARTMENT CODE                                  *3
       │        < 07 >  ISDN-TID
       │        < 08 >  ISDN-SUB NO.
       ├─ MACHINE SETTINGS
       │        < 10 >  AUTO ANSWER MODE          FAX/TEL/TF/TAD/MEM/PC/FWD
       │        < 11 >  MONITOR VOLUME           SELECT FROM 5 SOUND LEVEL
       │        < 12 >  BUZZER VOLUME            SELECT FROM 3 SOUND LEVEL
       │        < 13 >  USER LANGUAGE            LNG1/LNG2
       │        < 14 >  REMOTE DIAGNOSIS         ON/OFF
       │        < 15 >  TX MODE DEFAULT          RESOL./CONTRAST
       │        < 16 >  NO TONER MEM. RX         ON/OFF
       │        < 17 >  MEM. FULL SAVE           ON/OFF
       │        < 18 >  INSTANT DIAL             ON/OFF
       │        < 19 >  DEPARTMENT CODE          ON/OFF                  *4
       │        < 20 >  ECM FUNCTION             ON/OFF
       │        < 21 >  CLOSED NETWORK           OFF/TXRX/RX
       │        < 22 >  TONER SAVE               ON/OFF
       │        < 23 >  SENDER ID                ON/OFF
       │        < 24 >  WIDTH REDUCTION          ON/OFF                  *5
       │        < 25 >  1'ST PAPER SIZE          SELECT FROM 8 PAPER SIZE
       │        < 26 >  2'ND PAPER SIZE          SELECT FROM 7 PAPER SIZE
       │        < 27 >  POWER SAVE MODE          ON/OFF
       │        < 28 >  RELAY PRINT              ON/OFF
       │        < 29 >  600DPI FUNCTION          ON/OFF
       │        < 30 >  ISDN DIAL MODE           G4 MODE/G3 MODE
       │        < 31 >  SPEECH RECEIVE           ON/OFF
       │        < 32 >  OPTION LINE TYPE         TX/RX/ALL
       │        < 33 >  BACKUP FILE TX           ON/OFF                  *6
       ├─ DIAL OPTIONS
       │        < 40 >  REDIAL TRIES             0-10 TRIES
       │        < 41 >  REDIAL INTERVAL          1-6 MIN
       │        < 42 >  AUTO START               ON/OFF
       │        < 43 >  DIAL TONE DETECT         ON/OFF
       │        < 44 >  BUSY TONE DETECT         ON/OFF
       │        < 45 >  MF/DP                    MF/DP
       │        < 46 >  PULSE DIAL RATE          10/16/20 PPS
       │        < 47 >  PULSE MAKE RATIO         33/39/40 %
       │        < 48 >  PULSE DIAL TYPE          N/10-N/N+1
       │        < 49 >  MF(TONE)DURATION         75/85/100 MS
       │        < 50 >  PBX LINE                 ON/OFF
       │        < 51 >  FLS/EARTH/NORMAL         FLASH/EARTH/NORMAL
       │        < 52 >  DIAL PREFIX              OFF/4DIGITS(MAX.)
```

Function List (page 2)

FUNCTION LIST P3

07/01/2001 22:00
ID=0dc Takasaki

```
MENU
 ├─ SETUP
 │   ├─ INCOMING OPTIONS
 │   │      < 60 >  INCOMING RING              OFF/ON/DRC
 │   │      < 61 >  REMOTE RECEIVE             OFF/00-99/**/##
 │   │      < 62 >  T/F TIMER PRG.              20/35 SEC
 │   │      < 63 >  CONTINUOUS TONE             ON/OFF
 │   │      < 64 >  PC/FAX SWITCH               ON/OFF
 │   │      < 65 >  CNG COUNT                   1-5 TIMES
 │   │      < 66 >  RING RESPONSE               1RING/5/10/15/20 SEC
 │   │      < 67 >  DISTINCTIVE RING            OFF/ON/SET
 │   ├─ REPORT OPTIONS
 │   │      < 70 >  MCF. (SINGLE-LOC.)          ON/OFF
 │   │      < 71 >  MCF. (MULTI-LOC.)           ON/OFF
 │   │      < 72 >  MESSAGE IN MCF.             ON/OFF
 │   │      < 73 >  ERR. REPORT (MCF.)          ON/OFF
 │   ├─ LAN OPTIONS
 │   │      < 80 >  AUTO TRAY SW                ON/OFF
 │   │      < 81 >  PAPER SIZE CHECK            ON/OFF
 │   │      < 82 >  LAN PRINT T.O.              5SEC/30SEC/5MIN
 │   │      < 83 >  POP INTERVAL                OFF/1M/5M/10M/30M/60M/DAILY    *7
 │   │      < 84 >  DELETE POP MSG.             OFF/TYPE1/TYPE2
 │   │      < 85 >  TIME BETWEEN GMT            -12 - +12
 │   │      < 86 >  TEXT PRINT                  ON/OFF
 │   │      < 87 >  HEADER PRINT                NON/TYPE1/TYPE2
 │   │      < 88 >  ENCODING MODE               MH/MR/MMR
 │   │      < 89 >  EXFINE MODE                 300/600 DPI
 │   │      < 90 >  SENDER ID(EMAIL)            ON/OFF                         *8
 │   │      < 91 >  DOMAIN NAME                 ENTER DOMAIN NAME
 │   │      < 92 >  RETURN RECEIPT              ON/OFF                         *9
 │   │      < 93 >  RECEIPT FORMAT              TEXT/MDN                       *10
 │   │      < 94 >  SEND FILE FORMAT            TIFF/PDF                       *10
 │   │      < 95 >  POP GW SUBJECT              ENTER SUBJECT AND PASSWORD     *10
 │   │      < 96 >  GW FORWARD TEXT             ON/OFF                         *10
 │   │      < 97 >  SEND NOTIFICATION           ON/OFF                         *10
 │   │      < 98 >  NETWORK SETTINGS            REFER TO NIC CONFIGURATION
 ├─ COUNTER
 │   ├─ DRUM COUNT
 │   ├─ TONER COUNT
 │   ├─ DRUM(T) COUNT
 │   ├─ PRINT COUNT
 │   ├─ SCAN COUNT
 ├─ PRINTER CLEANING
 │
```

Function List (page 3)

1.6.3 Help Report

Output the following new report by pressing HELP key while the device is in standby state. Following this report, output conventional function list. (4 sheets in total)

1.6.3.1 Report Image (Conditions for descriptions)

(1) If the line for descriptions is in blank, don't move up descriptions in the following lines. (Keep the blank line blank.)

HELP REPORT

07/01/2001 22:00
ID=Odc Takasaki

```
HELP GUIDE FOR KEY FEATURES - REFER TO USER GUIDE FOR MORE DETAILED
NOTE: NAVIGATE TO MENU SETTINGS USING THE SHIFT KEY

1:PROGRAM SPEED DIAL NUMBERS
  MENU -> NAVIGATE TO LOCATION PROGRAM -> ENTER -> SELECT SPEED DIAL ->
  ENTER -> SELECT SPEED DIAL NUMBER -> FOLLOW LCD PROMPTS -> ENTER

NOTE: TO PROGRAM A TELEPHONE NUMBER AT THE TIME OF SENDING THE
  DOCUMENT INTO THE FIRST AVAILABLE SPEED DIAL LOCATION:
  INSERT DOC -> ENTER TELEPHONE NUMBER -> ENTER -> CONFIRM THE SPEED
  DIAL LOCATION -> ENTER -> FOLLOW STEPS TO ENTER LOCATION DETAILS
  -> PRESS START TO SCAN DOCUMENT.

2:PROGRAM GROUPS
  MENU -> NAVIGATE TO LOCATION PROGRAM -> ENTER -> SELECT GROUP ->
  INPUT GROUP NUMBER -> ENTER -> SPEED DIAL -> ADD SPEED DIAL LOCATIONS
  -> ENTER -> REPEAT UNTIL ALL LOCATIONS ARE SELECTED -> START -> ENTER
  GROUP NAME ON ONE-TOUCH KEYPAD -> PRESS START

3:SENDING A FAX TO MULTIPLE LOCATIONS (BROADCAST)
  1:SENDING TO A GROUP:
  INSERT DOC -> SELECT RESOLUTION -> PRESS SPEED DIAL KEY -> SELECT
  GROUP BY PRESSING # KEY FOLLOWED BY THE GROUP NUMBER -> ENTER
  -> ENTER TO CONFIRM -> PRESS START

  2:BROADCAST SEND:
  INSERT DOC -> SELECT RESOLUTION -> (SELECT OT/SPEED DIAL/KEYPAD ->
  ENTER -> REPEAT UNTIL ALL LOCATIONS ARE SELECTED -> PRESS START

4:SENDING A FAX A SINGLE LOCATION
  INSERT DOC -> SELECT RESOLUTION -> SELECT OT/SPEED DIAL/KEYPAD/PRESS
  SEARCH -> CONFIRM LOCATION -> PRESS START

5:COPYING
  INSERT DOC -> SELECT RESOLUTION -> START -> ENTER NUMBER OF COPIES
  -> PRESS START

6:DELAYED FAXING
  INSERT DOC -> SELECT RESOLUTION -> MENU -> NAVIGATE TO DELAYED TX ->
  ENTER DATE AND TIME -> SELECT LOCATION -> ENTER -> PRESS START

7:FUNCTION SETTINGS (REFER TO FOLLOWING PAGES FOR FUNCTION LIST)
  MENU -> NAVIGATE TO SETUP -> ENTER -> NAVIGATE TO MACHINE SETUP ->
  ENTER -> NAVIGATE TO FUNCTION -> ENTER

8:REPORT PRINTING
  MENU -> NAVIGATE TO REPORT PRINT -> ENTER -> NAVIGATE TO REQUIRED
  REPORT -> ENTER

9:MESSAGE CONFIRMATION REPORT
  1:SET USER FUNCTION 70 AND 71 TO ON (FOR AUTO PRINT AFTER EACH TX)
  2:AFTER TRANSMISSION IS COMPLETE -> ENTER -> LCD DISPLAY -> ENTER TO
  MANUALLY PRINT OUT REPORT FOR LAST COMMUNICATION
```

1.6.4 Telephone Directory

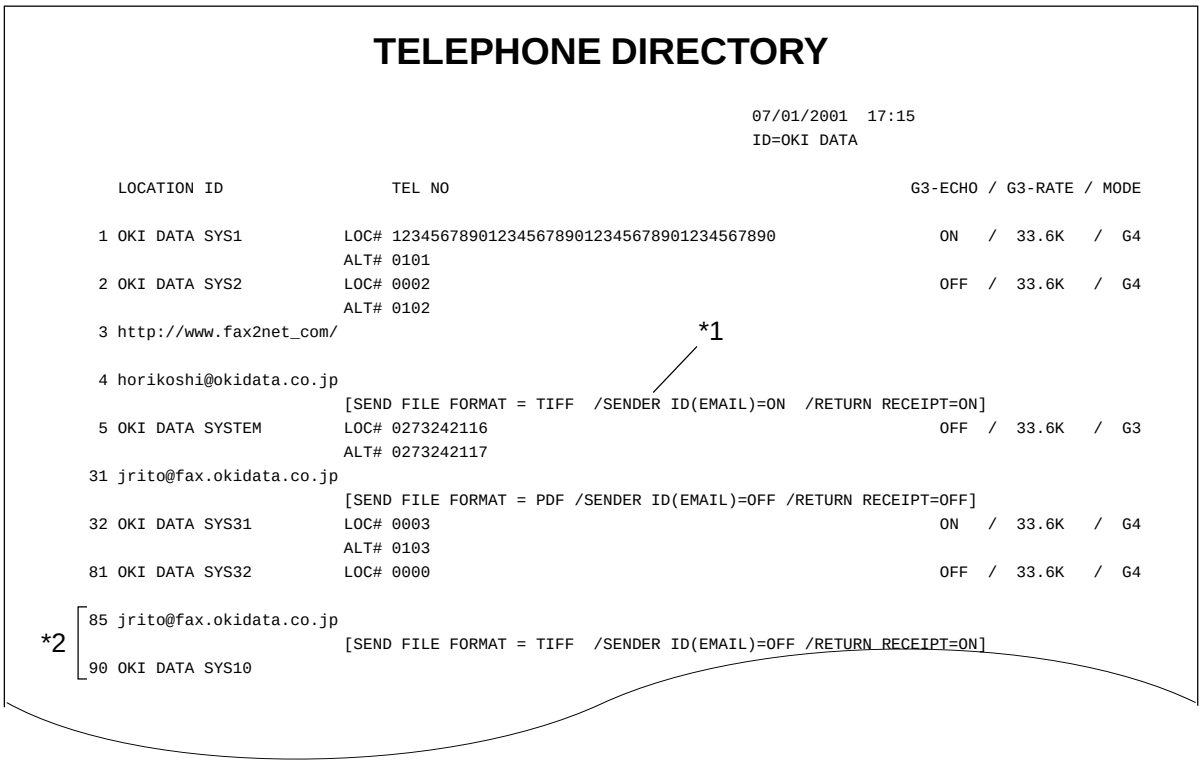
Method:
The report will be manually printed out.
The report prints destinations registered only.

Descriptions:
Speed Dial: Up to 140 for FX-056VP (ODA), up to 190 for FX-056VP (Except ODA), up to 230 for FX-176VP

1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Programmed ID (up to 64 characters)
5. Programmed Speed Dial telephone numbers (up to 40 digits)
6. Programmed alternative destination (ALT#: alternate TEL No.) telephone numbers
   ALT#: 1 to 50 for FX-056VP, 1 to 90 for FX-176VP
7. Programmed communication parameters (G3-ECHO/G3-RATE/MODE)
   * This item is not listed in case of E-mail and Web URL.
8. Programmed batch transmission time
   Batch transmission time can be set for Speed Dial 31 to 40.

1.6.4.1 Difference from FX-056e/176e

*1 Lists the communication parameter settings of the Email-registered Speed Dials (Send File Format/Sender ID (Email)/Return Receipt).
*2 Indicates the Email addresses of not only the One Touch Keys but also the following Speed Dials.
FX-056VP: S.D.41 ~ 50
FX-176VP: S.D.81 ~ 90



TELEPHONE DIRECTORY P1

07/01/2001 17:05
ID=OKI

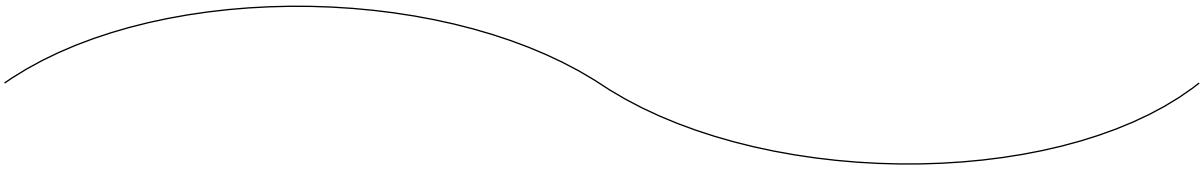
	LOCATION ID	TEL NO	G3-ECHO / G3-RATE / MODE
1	OKI DATA SYS1	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0101	ON / 33.6 / G4
2	OKI DATA SYS2	LOC# 0002 ALT# 0102	OFF / 33.6 / G4
3	OKI DATA SYS3	LOC# 0003 ALT# 0103	ON / 33.6 / G4
4	OKI DATA SYS4	LOC# 0004 ALT# 0104	ON / 33.6 / G4
5	OKI DATA SYS5	LOC# 0005 ALT# 0105	ON / 33.6 / G4
6	OKI DATA SYS6	LOC# 0006 ALT# 0106	ON / 33.6 / G4
7		LOC# 0007 ALT# 0107	ON / 33.6 / G4
8	OKI DATA SYS8	LOC# 0008 ALT# 0108	ON / 33.6 / G4
9	OKI DATA SYS9	LOC# 0009 ALT# 0109	ON / 33.6 / G4
10	OKI DATA SYS10	LOC# 0010 ALT# 0110	ON / 33.6 / G4
11	OKI DATA SYS11	LOC# 0010 ALT# 0010	ON / 33.6 / G4
12	OKI DATA SYS12	LOC# 12345678901234567890124567890123456789 0 ALT# 010	ON / 33.6 / G4
20	OKI DATA SYS20	LOC# 0010 ALT# 0110	ON / 33.6 / G4
21	OKI DATA SYS21	LOC# 0010 ALT#	ON / 33.6 / G4
22	OKI DATA SYS22	LOC# 0010 ALT# 0010	ON / 33.6 / G4
23	OKI DATA SYS23	LOC# 0010 ALT# 0010	ON / 33.6 / G4
24	OKI DATA SYS24	LOC# 0010 ALT# 0010	ON / 33.6 / G4
25	OKI DATA SYS25	LOC# 0010 ALT# 0010	ON / 33.6 / G4
26	OKI DATA SYS26	LOC# 0010 ALT#	ON / 33.6 / G4
27	OKI DATA SYS27	LOC# 0010 ALT# 0010	ON / 33.6 / G4
28	OKI DATA SYS28	LOC# 0010 ALT# 0010	ON / 33.6 / G4
29	OKI DATA SYS29	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	ON / 33.6 / G4
30	OKI DATA SYS30	LOC# 0010 ALT# 0010	ON / 33.6 / G4

Telephone Directory P1 for FX-056VP (ODA)

TELEPHONE DIRECTORY P2

07/01/2001 17:05
ID=OKI

LOCATION ID	TEL NO		G3-ECHO	/	G3-RATE	/	MODE
31 OKI DATA SYS31	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	[12:12]	ON	/	33.6	/	G4
32 OKI DATA SYS32	LOC# 0010 ALT# 0010	[12:12]	ON	/	33.6	/	G4
33 OKI DATA SYS33	LOC# 0010 ALT# 0010	[17:12]	ON	/	33.6	/	G4
34 OKI DATA SYS34	LOC# 0010 ALT# 0010	[:]	ON	/	33.6	/	G4
35 OKI DATA SYS35	LOC# 0010 ALT# 0010	[20:30]	ON	/	33.6	/	G4
36 OKI DATA SYS36	LOC# 0010 ALT# 0010	[21:00]	ON	/	33.6	/	G4
37 OKI DATA SYS37	LOC# 0010 ALT# 0010	[21:30]	ON	/	33.6	/	G4
38 OKI DATA SYS38	LOC# 0010 ALT# 0010	[21:50]	ON	/	33.6	/	G4
39 OKI DATA SYS39	LOC# 0010 ALT# 0010	[22:12]	ON	/	33.6	/	G4
40 OKI DATA SYS40	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	[23:12]	ON	/	33.6	/	G3



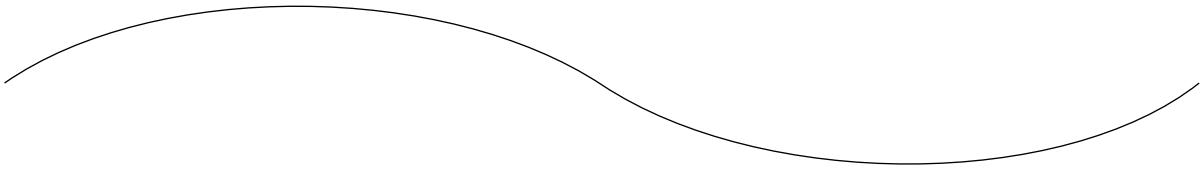
50 OKI DATA SYS50	LOC# 0010		ON	/	33.6	/	G4
51	LOC# 0010		ON	/	33.6	/	G4
52 OKI DATA SYS52	LOC# 0010		ON	/	33.6	/	G4
53 OKI DATA SYS53	LOC# 0010		ON	/	33.6	/	G4
54 OKI DATA SYS54	LOC# 0010		ON	/	33.6	/	G4
55 OKI DATA SYS55	LOC# 0010		ON	/	33.6	/	G4
56 OKI DATA SYS56	LOC# 0010		ON	/	33.6	/	G4
57 OKI DATA SYS57	LOC# 0010		ON	/	33.6	/	G4
58 OKI DATA SYS58	LOC# 0010		ON	/	33.6	/	G4
59 OKI DATA SYS59	LOC# 0010		ON	/	33.6	/	G4
60 OKI DATA SYS60	LOC# 12345678901234567890123456789012345678901234567890		ON	/	33.6	/	G4

Telephone Directory P2 for FX-056VP (ODA)

TELEPHONE DIRECTORY P3

07/01/2001 17:05
ID=OKI

LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
61 OKI DATA SYS61	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
62 OKI DATA SYS62	LOC# 0002	OFF	/	33.6	/	G4
63 OKI DATA SYS63	LOC# 0003	ON	/	33.6	/	G4
64 OKI DATA SYS64	LOC# 0004	ON	/	33.6	/	G4
65	LOC# 0005	ON	/	33.6	/	G4
66 OKI DATA SYS56	LOC# 0006	ON	/	33.6	/	G4
67 OKI DATA SYS67	LOC# 0007	ON	/	33.6	/	G4
68 OKI DATA SYS58	LOC# 0008	ON	/	33.6	/	G4
69 OKI DATA SYS59	LOC# 0009	ON	/	33.6	/	G4
70 OKI DATA SYS70	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



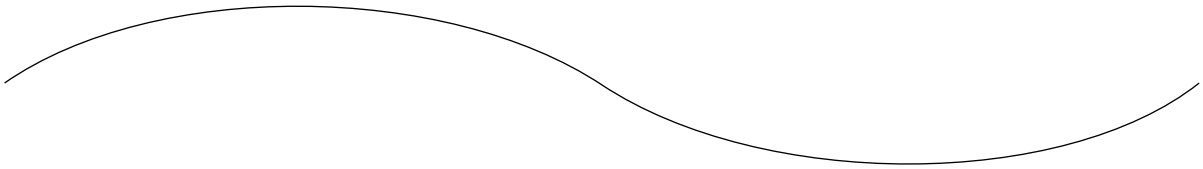
80 OKI DATA SYS80	LOC# 0010	ON	/	33.6	/	G4
81 OKI DATA SYS81	LOC# 0010	ON	/	33.6	/	G4
82 OKI DATA SYS82	LOC# 0010	ON	/	33.6	/	G4
83 OKI DATA SYS83	LOC# 0010	ON	/	33.6	/	G4
84 OKI DATA SYS84	LOC# 0010	ON	/	33.6	/	G4
85 OKI DATA SYS85	LOC# 0010	ON	/	33.6	/	G4
86 OKI DATA SYS86	LOC# 0010	ON	/	33.6	/	G4
87 OKI DATA SYS87	LOC# 0010	ON	/	33.6	/	G4
88 OKI DATA SYS88	LOC# 0010	ON	/	33.6	/	G4
89 OKI DATA SYS89	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
90 OKI DATA SYS90	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P3 for FX-056VP (ODA)

TELEPHONE DIRECTORY P4

07/01/2001 17:05
ID=OKI

LOCATION ID	TEL NO	G3-ECHO	G3-RATE	MODE
91 OKI DATA SYS91	LOC# 12345678901234567890123456789012345678901234567890	ON	33.6	G4
92 OKI DATA SYS92	LOC# 0002	OFF	33.6	G4
93 OKI DATA SYS93	LOC# 0003	ON	33.6	G4
94 OKI DATA SYS94	LOC# 0004	ON	33.6	G4
95	LOC# 0005	ON	33.6	G4
96 OKI DATA SYS96	LOC# 0006	ON	33.6	G4
97 OKI DATA SYS97	LOC# 0007	ON	33.6	G4
98 OKI DATA SYS98	LOC# 0008	ON	33.6	G4
99 OKI DATA SYS99	LOC# 0009	ON	33.6	G4
100 OKI DATA SYS100	LOC# 12345678901234567890123456789012345678901234567890	ON	33.6	G3



110 OKI DATA SYS110	LOC# 0010	ON	33.6	G4
111 OKI DATA SYS111	LOC# 0010	ON	33.6	G4
112 OKI DATA SYS112	LOC# 0010	ON	33.6	G4
113 OKI DATA SYS113	LOC# 0010	ON	33.6	G4
114 OKI DATA SYS114	LOC# 0010	ON	33.6	G4
115 OKI DATA SYS115	LOC# 0010	ON	33.6	G4
116 OKI DATA SYS116	LOC# 0010	ON	33.6	G4
117 OKI DATA SYS117	LOC# 0010	ON	33.6	G4
118 OKI DATA SYS118	LOC# 0010	ON	33.6	G4
119 OKI DATA SYS119	LOC# 12345678901234567890123456789012345678901234567890	ON	33.6	G4
120 OKI DATA SYS120	LOC# 0010	ON	33.6	G4

Telephone Directory P4 for FX-056VP (ODA)

TELEPHONE DIRECTORY P5

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
121	OKI DATA SYS121	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
122	OKI DATA SYS122	LOC# 0002	OFF	/	33.6	/	G4
123	OKI DATA SYS123	LOC# 0003	ON	/	33.6	/	G4
124	OKI DATA SYS124	LOC# 0004	ON	/	33.6	/	G4
125		LOC# 0005	ON	/	33.6	/	G4
126	OKI DATA SYS126	LOC# 0006	ON	/	33.6	/	G4
127	OKI DATA SYS127	LOC# 0007	ON	/	33.6	/	G4
128	OKI DATA SYS128	LOC# 0008	ON	/	33.6	/	G4
129	OKI DATA SYS129	LOC# 0009	ON	/	33.6	/	G4
130	OKI DATA SYS130	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
131	OKI DATA SYS131	LOC# 0010	ON	/	33.6	/	G4
132	OKI DATA SYS132	LOC# 0010	ON	/	33.6	/	G4
133	OKI DATA SYS133	LOC# 0010	ON	/	33.6	/	G4
134	OKI DATA SYS134	LOC# 0010	ON	/	33.6	/	G4
135	OKI DATA SYS135	LOC# 0010	ON	/	33.6	/	G4
136	OKI DATA SYS136	LOC# 0010	ON	/	33.6	/	G4
137	OKI DATA SYS137	LOC# 0010	ON	/	33.6	/	G4
138	OKI DATA SYS138	LOC# 0010	ON	/	33.6	/	G4
139	OKI DATA SYS139	LOC# 0010	ON	/	33.6	/	G4
140	OKI DATA SYS140	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4

Telephone Directory P5 for FX-056VP (ODA)

TELEPHONE DIRECTORY P1

07/01/2001 17:05
ID=OKI

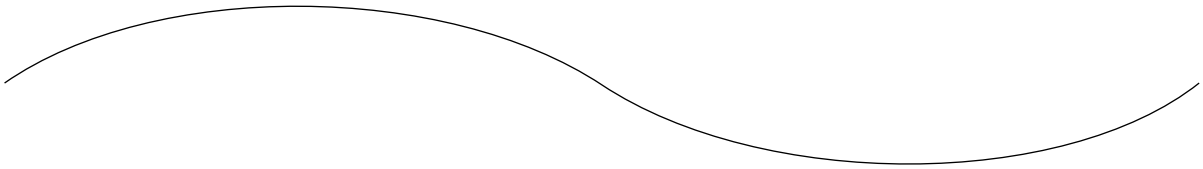
LOCATION ID	TEL NO	G3-ECHO / G3-RATE / MODE
1 OKI DATA SYS1	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0101	ON / 33.6 / G4
2 OKI DATA SYS2	LOC# 0002 ALT# 0102	OFF / 33.6 / G4
3 OKI DATA SYS3	LOC# 0003 ALT# 0103	ON / 33.6 / G4
4 OKI DATA SYS4	LOC# 0004 ALT# 0104	ON / 33.6 / G4
5 OKI DATA SYS5	LOC# 0005 ALT# 0105	ON / 33.6 / G4
6 OKI DATA SYS6	LOC# 0006 ALT# 0106	ON / 33.6 / G4
7	LOC# 0007 ALT# 0107	ON / 33.6 / G4
8 OKI DATA SYS8	LOC# 0008 ALT# 0108	ON / 33.6 / G4
9 OKI DATA SYS9	LOC# 0009 ALT# 0109	ON / 33.6 / G4
10 OKI DATA SYS10	LOC# 0010 ALT# 0110	ON / 33.6 / G4
11 OKI DATA SYS11	LOC# 0010 ALT# 0010	ON / 33.6 / G4
12 OKI DATA SYS12	LOC# 12345678901234567890124567890123456789O ALT# 010	ON / 33.6 / G4
20 OKI DATA SYS20	LOC# 0010 ALT# 0110	ON / 33.6 / G4
21 OKI DATA SYS21	LOC# 0010 ALT#	ON / 33.6 / G4
22 OKI DATA SYS22	LOC# 0010 ALT# 0010	ON / 33.6 / G4
23 OKI DATA SYS23	LOC# 0010 ALT# 0010	ON / 33.6 / G4
24 OKI DATA SYS24	LOC# 0010 ALT# 0010	ON / 33.6 / G4
25 OKI DATA SYS25	LOC# 0010 ALT# 0010	ON / 33.6 / G4
26 OKI DATA SYS26	LOC# 0010 ALT#	ON / 33.6 / G4
27 OKI DATA SYS27	LOC# 0010 ALT# 0010	ON / 33.6 / G4
28 OKI DATA SYS28	LOC# 0010 ALT# 0010	ON / 33.6 / G4
29 OKI DATA SYS29	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	ON / 33.6 / G4
30 OKI DATA SYS30	LOC# 0010 ALT# 0010	ON / 33.6 / G4

Telephone Directory P1 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P2

07/01/2001 17:05
ID=OKI

LOCATION ID	TEL NO		G3-ECHO	/	G3-RATE	/	MODE
31 OKI DATA SYS31	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	[12:12]	ON	/	33.6	/	G4
32 OKI DATA SYS32	LOC# 0010 ALT# 0010	[12:12]	ON	/	33.6	/	G4
33 OKI DATA SYS33	LOC# 0010 ALT# 0010	[17:12]	ON	/	33.6	/	G4
34 OKI DATA SYS34	LOC# 0010 ALT# 0010	[:]	ON	/	33.6	/	G4
35 OKI DATA SYS35	LOC# 0010 ALT# 0010	[20:30]	ON	/	33.6	/	G4
36 OKI DATA SYS36	LOC# 0010 ALT# 0010	[21:00]	ON	/	33.6	/	G4
37 OKI DATA SYS37	LOC# 0010 ALT# 0010	[21:30]	ON	/	33.6	/	G4
38 OKI DATA SYS38	LOC# 0010 ALT# 0010	[21:50]	ON	/	33.6	/	G4
39 OKI DATA SYS39	LOC# 0010 ALT# 0010	[22:12]	ON	/	33.6	/	G4
40 OKI DATA SYS40	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	[23:12]	ON	/	33.6	/	G3



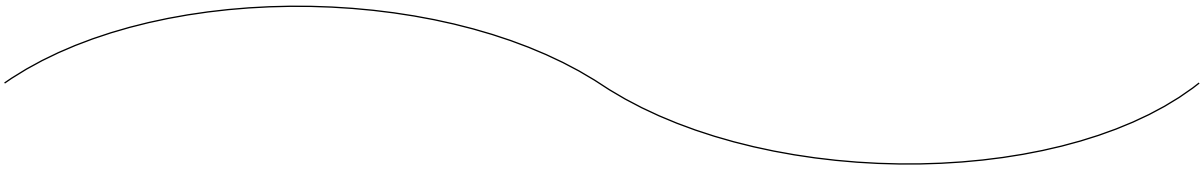
50 OKI DATA SYS50	LOC# 0010		ON	/	33.6	/	G4
51	LOC# 0010		ON	/	33.6	/	G4
52 OKI DATA SYS52	LOC# 0010		ON	/	33.6	/	G4
53 OKI DATA SYS53	LOC# 0010		ON	/	33.6	/	G4
54 OKI DATA SYS54	LOC# 0010		ON	/	33.6	/	G4
55 OKI DATA SYS55	LOC# 0010		ON	/	33.6	/	G4
56 OKI DATA SYS56	LOC# 0010		ON	/	33.6	/	G4
57 OKI DATA SYS57	LOC# 0010		ON	/	33.6	/	G4
58 OKI DATA SYS58	LOC# 0010		ON	/	33.6	/	G4
59 OKI DATA SYS59	LOC# 0010		ON	/	33.6	/	G4
60 OKI DATA SYS60	LOC# 12345678901234567890123456789012345678901234567890		ON	/	33.6	/	G4

Telephone Directory P2 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P3

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
61	OKI DATA SYS61	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
62	OKI DATA SYS62	LOC# 0002	OFF	/	33.6	/	G4
63	OKI DATA SYS63	LOC# 0003	ON	/	33.6	/	G4
64	OKI DATA SYS64	LOC# 0004	ON	/	33.6	/	G4
65		LOC# 0005	ON	/	33.6	/	G4
66	OKI DATA SYS56	LOC# 0006	ON	/	33.6	/	G4
67	OKI DATA SYS67	LOC# 0007	ON	/	33.6	/	G4
68	OKI DATA SYS58	LOC# 0008	ON	/	33.6	/	G4
69	OKI DATA SYS59	LOC# 0009	ON	/	33.6	/	G4
70	OKI DATA SYS70	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



80	OKI DATA SYS80	LOC# 0010	ON	/	33.6	/	G4
81	OKI DATA SYS81	LOC# 0010	ON	/	33.6	/	G4
82	OKI DATA SYS82	LOC# 0010	ON	/	33.6	/	G4
83	OKI DATA SYS83	LOC# 0010	ON	/	33.6	/	G4
84	OKI DATA SYS84	LOC# 0010	ON	/	33.6	/	G4
85	OKI DATA SYS85	LOC# 0010	ON	/	33.6	/	G4
86	OKI DATA SYS86	LOC# 0010	ON	/	33.6	/	G4
87	OKI DATA SYS87	LOC# 0010	ON	/	33.6	/	G4
88	OKI DATA SYS88	LOC# 0010	ON	/	33.6	/	G4
89	OKI DATA SYS89	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
90	OKI DATA SYS90	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P3 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P4

07/01/2001 17:05
ID=OKI

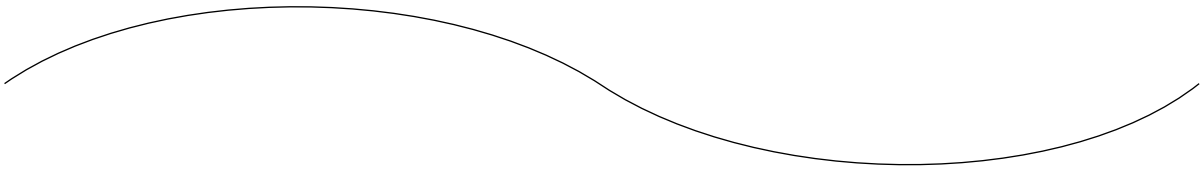
	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
91	OKI DATA SYS91	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
92	OKI DATA SYS92	LOC# 0002	OFF	/	33.6	/	G4
93	OKI DATA SYS93	LOC# 0003	ON	/	33.6	/	G4
94	OKI DATA SYS94	LOC# 0004	ON	/	33.6	/	G4
95		LOC# 0005	ON	/	33.6	/	G4
96	OKI DATA SYS96	LOC# 0006	ON	/	33.6	/	G4
97	OKI DATA SYS97	LOC# 0007	ON	/	33.6	/	G4
98	OKI DATA SYS98	LOC# 0008	ON	/	33.6	/	G4
99	OKI DATA SYS99	LOC# 0009	ON	/	33.6	/	G4
100	OKI DATA SYS100	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
110	OKI DATA SYS110	LOC# 0010	ON	/	33.6	/	G4
111	OKI DATA SYS111	LOC# 0010	ON	/	33.6	/	G4
112	OKI DATA SYS112	LOC# 0010	ON	/	33.6	/	G4
113	OKI DATA SYS113	LOC# 0010	ON	/	33.6	/	G4
114	OKI DATA SYS114	LOC# 0010	ON	/	33.6	/	G4
115	OKI DATA SYS115	LOC# 0010	ON	/	33.6	/	G4
116	OKI DATA SYS116	LOC# 0010	ON	/	33.6	/	G4
117	OKI DATA SYS117	LOC# 0010	ON	/	33.6	/	G4
118	OKI DATA SYS118	LOC# 0010	ON	/	33.6	/	G4
119	OKI DATA SYS119	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
120	OKI DATA SYS120	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P4 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P5

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
121	OKI DATA SYS121	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
122	OKI DATA SYS122	LOC# 0002	OFF	/	33.6	/	G4
123	OKI DATA SYS123	LOC# 0003	ON	/	33.6	/	G4
124	OKI DATA SYS124	LOC# 0004	ON	/	33.6	/	G4
125		LOC# 0005	ON	/	33.6	/	G4
126	OKI DATA SYS126	LOC# 0006	ON	/	33.6	/	G4
127	OKI DATA SYS127	LOC# 0007	ON	/	33.6	/	G4
128	OKI DATA SYS128	LOC# 0008	ON	/	33.6	/	G4
129	OKI DATA SYS129	LOC# 0009	ON	/	33.6	/	G4
130	OKI DATA SYS130	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



140	OKI DATA SYS140	LOC# 0010	ON	/	33.6	/	G4
141	OKI DATA SYS141	LOC# 0010	ON	/	33.6	/	G4
142	OKI DATA SYS142	LOC# 0010	ON	/	33.6	/	G4
143	OKI DATA SYS143	LOC# 0010	ON	/	33.6	/	G4
144	OKI DATA SYS144	LOC# 0010	ON	/	33.6	/	G4
145	OKI DATA SYS145	LOC# 0010	ON	/	33.6	/	G4
146	OKI DATA SYS146	LOC# 0010	ON	/	33.6	/	G4
147	OKI DATA SYS147	LOC# 0010	ON	/	33.6	/	G4
148	OKI DATA SYS148	LOC# 0010	ON	/	33.6	/	G4
149	OKI DATA SYS149	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
150	OKI DATA SYS150	LOC# 0010	ON	/	33.6	/	G4

Telephonre Directory P5 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P6

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
151	OKI DATA SYS151	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
152	OKI DATA SYS152	LOC# 0002	OFF	/	33.6	/	G4
153	OKI DATA SYS153	LOC# 0003	ON	/	33.6	/	G4
154	OKI DATA SYS154	LOC# 0004	ON	/	33.6	/	G4
155		LOC# 0005	ON	/	33.6	/	G4
156	OKI DATA SYS156	LOC# 0006	ON	/	33.6	/	G4
157	OKI DATA SYS157	LOC# 0007	ON	/	33.6	/	G4
158	OKI DATA SYS158	LOC# 0008	ON	/	33.6	/	G4
159	OKI DATA SYS159	LOC# 0009	ON	/	33.6	/	G4
160	OKI DATA SYS160	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
170	OKI DATA SYS170	LOC# 0010	ON	/	33.6	/	G4
171	OKI DATA SYS171	LOC# 0010	ON	/	33.6	/	G4
172	OKI DATA SYS172	LOC# 0010	ON	/	33.6	/	G4
173	OKI DATA SYS173	LOC# 0010	ON	/	33.6	/	G4
174	OKI DATA SYS174	LOC# 0010	ON	/	33.6	/	G4
175	OKI DATA SYS175	LOC# 0010	ON	/	33.6	/	G4
176	OKI DATA SYS176	LOC# 0010	ON	/	33.6	/	G4
177	OKI DATA SYS177	LOC# 0010	ON	/	33.6	/	G4
178	OKI DATA SYS178	LOC# 0010	ON	/	33.6	/	G4
179	OKI DATA SYS179	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
180	OKI DATA SYS180	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P6 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P7

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
181	OKI DATA SYS181	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
182	OKI DATA SYS182	LOC# 0002	OFF	/	33.6	/	G4
183	OKI DATA SYS183	LOC# 0003	ON	/	33.6	/	G4
184	OKI DATA SYS184	LOC# 0004	ON	/	33.6	/	G4
185		LOC# 0005	ON	/	33.6	/	G4
186	OKI DATA SYS186	LOC# 0006	ON	/	33.6	/	G4
187	OKI DATA SYS187	LOC# 0007	ON	/	33.6	/	G4
188	OKI DATA SYS188	LOC# 0008	ON	/	33.6	/	G4
189	OKI DATA SYS189	LOC# 0009	ON	/	33.6	/	G4
190	OKI DATA SYS190	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3

Telephone Directory P7 for FX-056VP (Except ODA)

TELEPHONE DIRECTORY P1

07/01/2001 17:05
ID=OKI

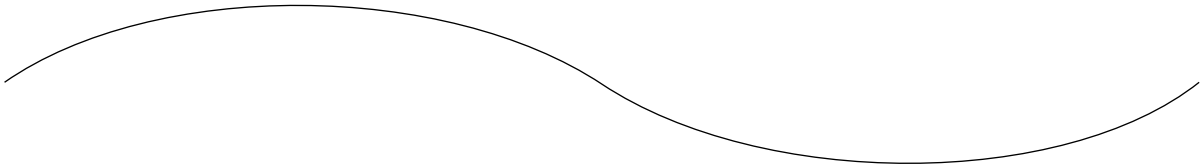
	LOCATION ID	TEL NO	G3-ECHO / G3-RATE / MODE
1	OKI DATA SYS1	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0101	ON / 33.6 / G4
2	OKI DATA SYS2	LOC# 0002 ALT# 0102	OFF / 33.6 / G4
3	OKI DATA SYS3	LOC# 0003 ALT# 0103	ON / 33.6 / G4
4	OKI DATA SYS4	LOC# 0004 ALT# 0104	ON / 33.6 / G4
5	OKI DATA SYS5	LOC# 0005 ALT# 0105	ON / 33.6 / G4
6	OKI DATA SYS6	LOC# 0006 ALT# 0106	ON / 33.6 / G4
7		LOC# 0007 ALT# 0107	ON / 33.6 / G4
8	OKI DATA SYS8	LOC# 0008 ALT# 0108	ON / 33.6 / G4
9	OKI DATA SYS9	LOC# 0009 ALT# 0109	ON / 33.6 / G4
10	OKI DATA SYS10	LOC# 0010 ALT# 0110	ON / 33.6 / G4
11	OKI DATA SYS11	LOC# 0010 ALT# 0010	ON / 33.6 / G4
12	OKI DATA SYS12	LOC# 12345678901234567890124567890123456789O ALT# 010	ON / 33.6 / G4
20	OKI DATA SYS20	LOC# 0010 ALT# 0110	ON / 33.6 / G4
21	OKI DATA SYS21	LOC# 0010 ALT#	ON / 33.6 / G4
22	OKI DATA SYS22	LOC# 0010 ALT# 0010	ON / 33.6 / G4
23	OKI DATA SYS23	LOC# 0010 ALT# 0010	ON / 33.6 / G4
24	OKI DATA SYS24	LOC# 0010 ALT# 0010	ON / 33.6 / G4
25	OKI DATA SYS25	LOC# 0010 ALT# 0010	ON / 33.6 / G4
26	OKI DATA SYS26	LOC# 0010 ALT#	ON / 33.6 / G4
27	OKI DATA SYS27	LOC# 0010 ALT# 0010	ON / 33.6 / G4
28	OKI DATA SYS28	LOC# 0010 ALT# 0010	ON / 33.6 / G4
29	OKI DATA SYS29	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	ON / 33.6 / G4
30	OKI DATA SYS30	LOC# 0010 ALT# 0010	ON / 33.6 / G4

Telephone Directory P1 for FX-176VP

TELEPHONE DIRECTORY P2

07/01/2001 17:05
ID=OKI

LOCATION ID	TEL NO		G3-ECHO	/	G3-RATE	/	MODE
31 OKI DATA SYS31	LOC# 12345678901234567890123456789012345678901234567890	[12:12]	ON	/	33.6	/	G4
	ALT# 0010						
32 OKI DATA SYS32	LOC# 0010	[12:12]	ON	/	33.6	/	G4
	ALT# 0010						
33 OKI DATA SYS33	LOC# 0010	[17:12]	ON	/	33.6	/	G4
	ALT# 0010						
34 OKI DATA SYS34	LOC# 0010	[:]	ON	/	33.6	/	G4
	ALT# 0010						
35 OKI DATA SYS35	LOC# 0010	[20:30]	ON	/	33.6	/	G4
	ALT# 0010						
36 OKI DATA SYS36	LOC# 0010	[21:00]	ON	/	33.6	/	G4
	ALT# 0010						
37 OKI DATA SYS37	LOC# 0010	[21:30]	ON	/	33.6	/	G4
	ALT# 0010						
38 OKI DATA SYS38	LOC# 0010	[21:50]	ON	/	33.6	/	G4
	ALT# 0010						
39 OKI DATA SYS39	LOC# 0010	[22:12]	ON	/	33.6	/	G4
	ALT# 0010						
40 OKI DATA SYS40	LOC# 12345678901234567890123456789012345678901234567890	[23:12]	ON	/	33.6	/	G3
	ALT# 0010						



50 OKI DATA SYS50	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
51	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
52 OKI DATA SYS52	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
53 OKI DATA SYS53	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
54 OKI DATA SYS54	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
55 OKI DATA SYS55	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
56 OKI DATA SYS56	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
57 OKI DATA SYS57	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
58 OKI DATA SYS58	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
59 OKI DATA SYS59	LOC# 0010		ON	/	33.6	/	G4
	ALT# 0010						
60 OKI DATA SYS60	LOC# 12345678901234567890123456789012345678901234567890		ON	/	33.6	/	G4
	ALT# 0010						

Telephone Directory P2 for FX-176VP

TELEPHONE DIRECTORY P3

07/01/2001 17:05
ID=OKI

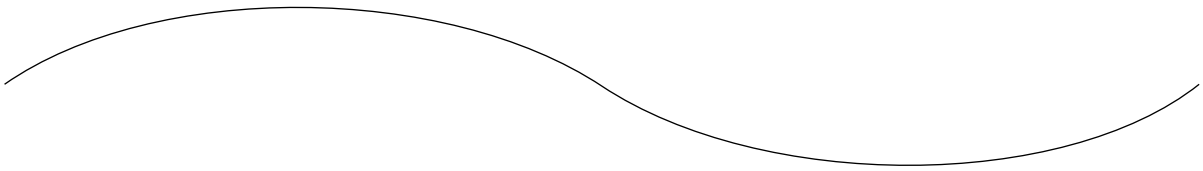
LOCATION ID	TEL NO	G3-ECHO / G3-RATE / MODE
61 OKI DATA SYS61	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	ON / 33.6 / G4
62 OKI DATA SYS62	LOC# 0002 ALT# 0010	OFF / 33.6 / G4
63 OKI DATA SYS63	LOC# 0003 ALT# 0010	ON / 33.6 / G4
64 OKI DATA SYS64	LOC# 0004 ALT# 0010	ON / 33.6 / G4
65	LOC# 0005 ALT# 0010	ON / 33.6 / G4
66 OKI DATA SYS56	LOC# 0006 ALT# 0010	ON / 33.6 / G4
67 OKI DATA SYS67	LOC# 0007 ALT# 0010	ON / 33.6 / G4
68 OKI DATA SYS58	LOC# 0008 ALT# 0010	ON / 33.6 / G4
69 OKI DATA SYS59	LOC# 0009 ALT# 0010	ON / 33.6 / G4
70 OKI DATA SYS70	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0010	ON / 33.6 / G3
80 OKI DATA SYS80	LOC# 0010 ALT# 0010	ON / 33.6 / G4
81 OKI DATA SYS81	LOC# 0010	ON / 33.6 / G4
82 OKI DATA SYS82	LOC# 0010	ON / 33.6 / G4
83 OKI DATA SYS83	LOC# 0010	ON / 33.6 / G4
84 OKI DATA SYS84	LOC# 0010	ON / 33.6 / G4
85 OKI DATA SYS85	LOC# 0010	ON / 33.6 / G4
86 OKI DATA SYS86	LOC# 0010	ON / 33.6 / G4
87 OKI DATA SYS87	LOC# 0010	ON / 33.6 / G4
88 OKI DATA SYS88	LOC# 0010	ON / 33.6 / G4
89 OKI DATA SYS89	LOC# 12345678901234567890123456789012345678901234567890	ON / 33.6 / G3
90 OKI DATA SYS90	LOC# 0010	ON / 33.6 / G4

Telephone Directory P3 for FX-176VP

TELEPHONE DIRECTORY P4

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
91	OKI DATA SYS91	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
92	OKI DATA SYS92	LOC# 0002	OFF	/	33.6	/	G4
93	OKI DATA SYS93	LOC# 0003	ON	/	33.6	/	G4
94	OKI DATA SYS94	LOC# 0004	ON	/	33.6	/	G4
95		LOC# 0005	ON	/	33.6	/	G4
96	OKI DATA SYS96	LOC# 0006	ON	/	33.6	/	G4
97	OKI DATA SYS97	LOC# 0007	ON	/	33.6	/	G4
98	OKI DATA SYS98	LOC# 0008	ON	/	33.6	/	G4
99	OKI DATA SYS99	LOC# 0009	ON	/	33.6	/	G4
100	OKI DATA SYS100	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



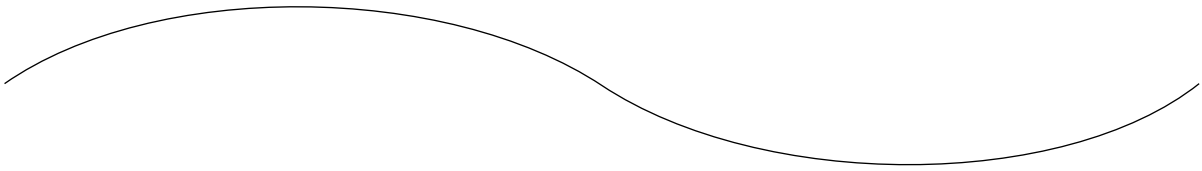
110	OKI DATA SYS110	LOC# 0010	ON	/	33.6	/	G4
111	OKI DATA SYS111	LOC# 0010	ON	/	33.6	/	G4
112	OKI DATA SYS112	LOC# 0010	ON	/	33.6	/	G4
113	OKI DATA SYS113	LOC# 0010	ON	/	33.6	/	G4
114	OKI DATA SYS114	LOC# 0010	ON	/	33.6	/	G4
115	OKI DATA SYS115	LOC# 0010	ON	/	33.6	/	G4
116	OKI DATA SYS116	LOC# 0010	ON	/	33.6	/	G4
117	OKI DATA SYS117	LOC# 0010	ON	/	33.6	/	G4
118	OKI DATA SYS118	LOC# 0010	ON	/	33.6	/	G4
119	OKI DATA SYS119	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
120	OKI DATA SYS120	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P4 for FX-176VP

TELEPHONE DIRECTORY P5

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
121	OKI DATA SYS121	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
122	OKI DATA SYS122	LOC# 0002	OFF	/	33.6	/	G4
123	OKI DATA SYS123	LOC# 0003	ON	/	33.6	/	G4
124	OKI DATA SYS124	LOC# 0004	ON	/	33.6	/	G4
125		LOC# 0005	ON	/	33.6	/	G4
126	OKI DATA SYS126	LOC# 0006	ON	/	33.6	/	G4
127	OKI DATA SYS127	LOC# 0007	ON	/	33.6	/	G4
128	OKI DATA SYS128	LOC# 0008	ON	/	33.6	/	G4
129	OKI DATA SYS129	LOC# 0009	ON	/	33.6	/	G4
130	OKI DATA SYS130	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



140	OKI DATA SYS140	LOC# 0010	ON	/	33.6	/	G4
141	OKI DATA SYS141	LOC# 0010	ON	/	33.6	/	G4
142	OKI DATA SYS142	LOC# 0010	ON	/	33.6	/	G4
143	OKI DATA SYS143	LOC# 0010	ON	/	33.6	/	G4
144	OKI DATA SYS144	LOC# 0010	ON	/	33.6	/	G4
145	OKI DATA SYS145	LOC# 0010	ON	/	33.6	/	G4
146	OKI DATA SYS146	LOC# 0010	ON	/	33.6	/	G4
147	OKI DATA SYS147	LOC# 0010	ON	/	33.6	/	G4
148	OKI DATA SYS148	LOC# 0010	ON	/	33.6	/	G4
149	OKI DATA SYS149	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
150	OKI DATA SYS150	LOC# 0010	ON	/	33.6	/	G4

Telephonre Directory P5 for FX-176VP

TELEPHONE DIRECTORY P6

07/01/2001 17:05
ID=OKI

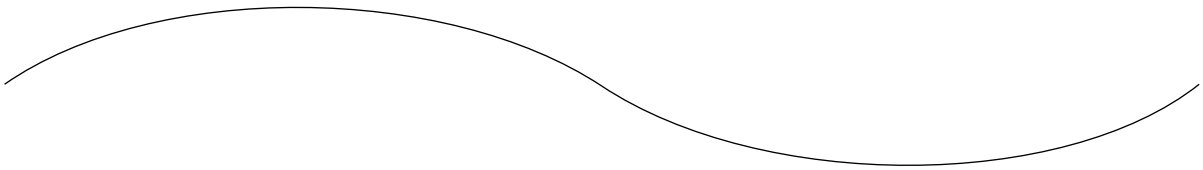
	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
151	OKI DATA SYS151	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
152	OKI DATA SYS152	LOC# 0002	OFF	/	33.6	/	G4
153	OKI DATA SYS153	LOC# 0003	ON	/	33.6	/	G4
154	OKI DATA SYS154	LOC# 0004	ON	/	33.6	/	G4
155		LOC# 0005	ON	/	33.6	/	G4
156	OKI DATA SYS156	LOC# 0006	ON	/	33.6	/	G4
157	OKI DATA SYS157	LOC# 0007	ON	/	33.6	/	G4
158	OKI DATA SYS158	LOC# 0008	ON	/	33.6	/	G4
159	OKI DATA SYS159	LOC# 0009	ON	/	33.6	/	G4
160	OKI DATA SYS160	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
170	OKI DATA SYS170	LOC# 0010	ON	/	33.6	/	G4
171	OKI DATA SYS171	LOC# 0010	ON	/	33.6	/	G4
172	OKI DATA SYS172	LOC# 0010	ON	/	33.6	/	G4
173	OKI DATA SYS173	LOC# 0010	ON	/	33.6	/	G4
174	OKI DATA SYS174	LOC# 0010	ON	/	33.6	/	G4
175	OKI DATA SYS175	LOC# 0010	ON	/	33.6	/	G4
176	OKI DATA SYS176	LOC# 0010	ON	/	33.6	/	G4
177	OKI DATA SYS177	LOC# 0010	ON	/	33.6	/	G4
178	OKI DATA SYS178	LOC# 0010	ON	/	33.6	/	G4
179	OKI DATA SYS179	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
180	OKI DATA SYS180	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P6 for FX-176VP

TELEPHONE DIRECTORY P7

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
181	OKI DATA SYS181	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
182	OKI DATA SYS182	LOC# 0002	OFF	/	33.6	/	G4
183	OKI DATA SYS183	LOC# 0003	ON	/	33.6	/	G4
184	OKI DATA SYS184	LOC# 0004	ON	/	33.6	/	G4
185		LOC# 0005	ON	/	33.6	/	G4
186	OKI DATA SYS186	LOC# 0006	ON	/	33.6	/	G4
187	OKI DATA SYS187	LOC# 0007	ON	/	33.6	/	G4
188	OKI DATA SYS188	LOC# 0008	ON	/	33.6	/	G4
189	OKI DATA SYS189	LOC# 0009	ON	/	33.6	/	G4
190	OKI DATA SYS190	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3



200	OKI DATA SYS200	LOC# 0010	ON	/	33.6	/	G4
201	OKI DATA SYS201	LOC# 0010	ON	/	33.6	/	G4
202	OKI DATA SYS202	LOC# 0010	ON	/	33.6	/	G4
203	OKI DATA SYS203	LOC# 0010	ON	/	33.6	/	G4
204	OKI DATA SYS204	LOC# 0010	ON	/	33.6	/	G4
205	OKI DATA SYS205	LOC# 0010	ON	/	33.6	/	G4
206	OKI DATA SYS206	LOC# 0010	ON	/	33.6	/	G4
207	OKI DATA SYS207	LOC# 0010	ON	/	33.6	/	G4
208	OKI DATA SYS208	LOC# 0010	ON	/	33.6	/	G4
209	OKI DATA SYS209	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
210	OKI DATA SYS210	LOC# 0010	ON	/	33.6	/	G4

Telephone Directory P7 for FX-176VP

TELEPHONE DIRECTORY P8

07/01/2001 17:05
ID=OKI

	LOCATION ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
211	OKI DATA SYS211	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4
212	OKI DATA SYS212	LOC# 0002	OFF	/	33.6	/	G4
213	OKI DATA SYS213	LOC# 0003	ON	/	33.6	/	G4
214	OKI DATA SYS214	LOC# 0004	ON	/	33.6	/	G4
215		LOC# 0005	ON	/	33.6	/	G4
216	OKI DATA SYS216	LOC# 0006	ON	/	33.6	/	G4
217	OKI DATA SYS217	LOC# 0007	ON	/	33.6	/	G4
218	OKI DATA SYS218	LOC# 0008	ON	/	33.6	/	G4
219	OKI DATA SYS219	LOC# 0009	ON	/	33.6	/	G4
220	OKI DATA SYS220	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G3
221	OKI DATA SYS221	LOC# 0010	ON	/	33.6	/	G4
222	OKI DATA SYS222	LOC# 0010	ON	/	33.6	/	G4
223	OKI DATA SYS223	LOC# 0010	ON	/	33.6	/	G4
224	OKI DATA SYS224	LOC# 0010	ON	/	33.6	/	G4
225	OKI DATA SYS225	LOC# 0010	ON	/	33.6	/	G4
226	OKI DATA SYS226	LOC# 0010	ON	/	33.6	/	G4
227	OKI DATA SYS227	LOC# 0010	ON	/	33.6	/	G4
228	OKI DATA SYS228	LOC# 0010	ON	/	33.6	/	G4
229	OKI DATA SYS229	LOC# 0010	ON	/	33.6	/	G4
230	OKI DATA SYS230	LOC# 12345678901234567890123456789012345678901234567890	ON	/	33.6	/	G4

Telephone Directory P8 for FX-176VP

TELEPHONE DIRECTORY

07/01/2001 17:05
ID=OKI

LOCATION	ID	TEL NO	G3-ECHO	/	G3-RATE	/	MODE
1	OKI DATA SYS1	LOC# 12345678901234567890123456789012345678901234567890 ALT# 0101	ON	/	33.6	/	G4
50	OKI DATA SYS50	LOC# 0002	OFF	/	33.6	/	G4
100	OKI DATA SYS100	LOC# 0003	ON	/	33.6	/	G4

Telephone Directory
(When the destination is registered by SPEED DIAL No. 1, No.50 and No. 100 only.)

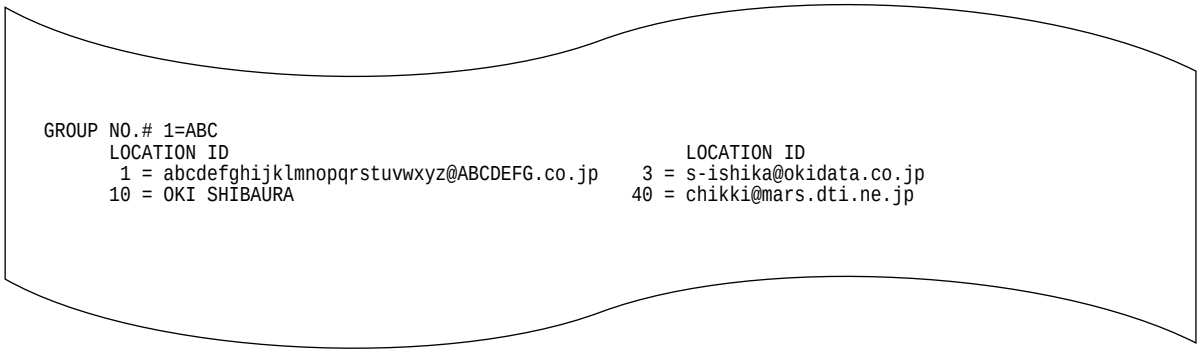
1.6.5 Group Directory

Method:
This list can be printed out manually for a selected group only (Group #1 to #20) through operation.

Description:
1. Title of the list
2. Date and time when the list was printed.
3. Sender ID
4. Registered Group No. and ID
5. Registered location ID (up to 40 characters)

1.6.5.1 Difference from FX-056e/176e

Includes both FAX numbers and Email addresses in one group.



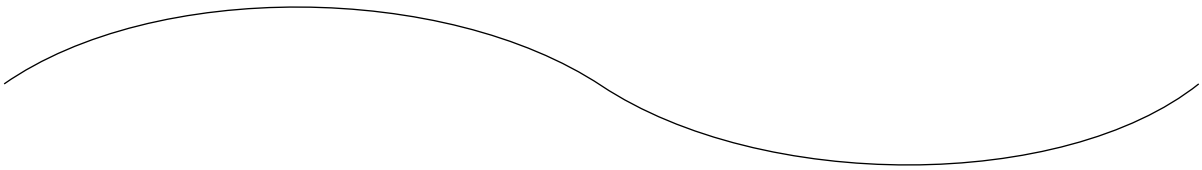
```
GROUP NO.# 1=ABC
      LOCATION ID                                        LOCATION ID
       1 = abcdefghijklmnopqrstuvwxyz@ABCDEFG.co.jp    3 = s-ishika@okidata.co.jp
      10 = OKI SHIBAURA                               40 = chikki@mars.dti.ne.jp
```

GROUP DIRECTORY

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

LOCATION ID		LOCATION ID	
1 =	12345678901234567890123456789012345678901234567890	2 =	12345678901234567890123456789012345678901234567890
3 =	OKI-SHIBAURA	4 =	OKI-SHIBAURA
5 =	FX-050	6 =	FX-175
7 =	FX-0175VP-ENHANC	8 =	FX-056
9 =	OKIFAX450	10 =	OKIFAX460M
11 =	M125INTL	12 =	M125-US
13 =	OKIFAX5600	14 =	OKIFAX1050
15 =	OKIFAX1000	16 =	OKIFAX2200
17 =	OF-3GX	18 =	115AD
19 =	2275	20 =	OF-8
21 =	OF-18	22 =	OF-58H
23 =	M4200	24 =	5400
25 =	OF-28	26 =	OF-1
27 =	OF-21	28 =	2127
29 =	OF-12M	30 =	OF-55M
31 =	M5600	32 =	ABCDEFGHIJKLMNO
33 =	OKIDATA-0000	34 =	OKIDATA-0001
35 =	OKIDATA-0003	36 =	OKIDATA-0004
37 =	OKIDATA-0006	38 =	OKIDATA-0007
39 =	OKIDATA-0009	40 =	OKIDATA-000A



101 =	OKIDATA-0001	102 =	OKIDATA-0002
103 =	OKIDATA-0003	104 =	OKIDATA-0004
105 =	OKIDATA-0005	106 =	OKIDATA-0006
107 =	OKIDATA-0007	108 =	OKIDATA-0008
109 =	OKIDATA-0009	110 =	OKIDATA-000A
111 =	OKIDATA-000B	112 =	OKIDATA-000C
113 =	OKIDATA-000D	114 =	OKIDATA-000E
115 =	OKIDATA-000F	116 =	OKIDATA-0010
117 =	OKIDATA-0011	118 =	OKIDATA-0012
119 =	OKIDATA-0013	120 =	OKIDATA-0014
121 =	OKIDATA-0015	122 =	OKIDATA-0016
123 =	OKIDATA-0017	124 =	OKIDATA-0018
125 =	OKIDATA-0019	126 =	OKIDATA-001A
127 =	OKIDATA-001B	128 =	OKIDATA-001C
129 =	OKIDATA-001D	130 =	OKIDATA-001E
131 =	OKIDATA-001F	132 =	OKIDATA-0020
133 =	OKIDATA-0021	134 =	OKIDATA-0022
135 =	OKIDATA-0023	136 =	OKIDATA-0024
137 =	OKIDATA-0025	138 =	OKIDATA-0026
139 =	OKIDATA-0027	140 =	OKIDATA-0028

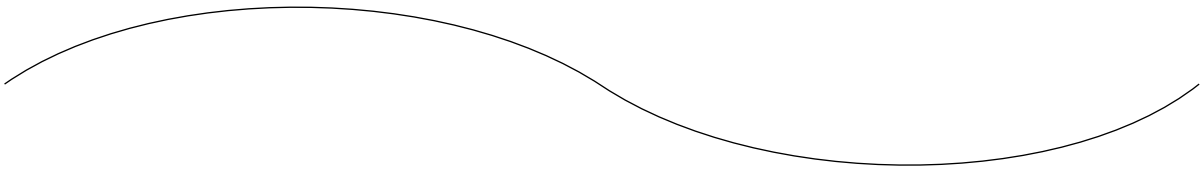
Group Directory for FX-056VP (ODA)

GROUP DIRECTORY P1

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

	LOCATION ID		LOCATION ID
1 =	12345678901234567890123456789012345678901234567890	2 =	12345678901234567890123456789012345678901234567890
3 =	OKI-SHIBAURA	4 =	OKI-SHIBAURA
5 =	FX-050	6 =	FX-175
7 =	FX-0175VP-ENHANC	8 =	FX-056
9 =	OKIFAX450	10 =	OKIFAX460M
11 =	M125INTL	12 =	M125-US
13 =	OKIFAX5600	14 =	OKIFAX1050
15 =	OKIFAX1000	16 =	OKIFAX2200
17 =	OF-3GX	18 =	115AD
19 =	2275	20 =	OF-8
21 =	OF-18	22 =	OF-58H
23 =	M4200	24 =	5400
25 =	OF-28	26 =	OF-1
27 =	OF-21	28 =	2127
29 =	OF-12M	30 =	OF-55M
31 =	M5600	32 =	ABCDEFGHIJKLMNO
33 =	OKIDATA-0000	34 =	OKIDATA-0001
35 =	OKIDATA-0003	36 =	OKIDATA-0004
37 =	OKIDATA-0006	38 =	OKIDATA-0007
39 =	OKIDATA-0009	40 =	OKIDATA-000A



101 =	OKIDATA-0001	102 =	OKIDATA-0002
103 =	OKIDATA-0003	104 =	OKIDATA-0004
105 =	OKIDATA-0005	106 =	OKIDATA-0006
107 =	OKIDATA-0007	108 =	OKIDATA-0008
109 =	OKIDATA-0009	110 =	OKIDATA-000A
111 =	OKIDATA-000B	112 =	OKIDATA-000C
113 =	OKIDATA-000D	114 =	OKIDATA-000E
115 =	OKIDATA-000F	116 =	OKIDATA-0010
117 =	OKIDATA-0011	118 =	OKIDATA-0012
119 =	OKIDATA-0013	120 =	OKIDATA-0014
121 =	OKIDATA-0015	122 =	OKIDATA-0016
123 =	OKIDATA-0017	124 =	OKIDATA-0018
125 =	OKIDATA-0019	126 =	OKIDATA-001A
127 =	OKIDATA-001B	128 =	OKIDATA-001C
129 =	OKIDATA-001D	130 =	OKIDATA-001E
131 =	OKIDATA-001F	132 =	OKIDATA-0020
133 =	OKIDATA-0021	134 =	OKIDATA-0022
135 =	OKIDATA-0023	136 =	OKIDATA-0024
137 =	OKIDATA-0025	138 =	OKIDATA-0026
139 =	OKIDATA-0027	140 =	OKIDATA-0028

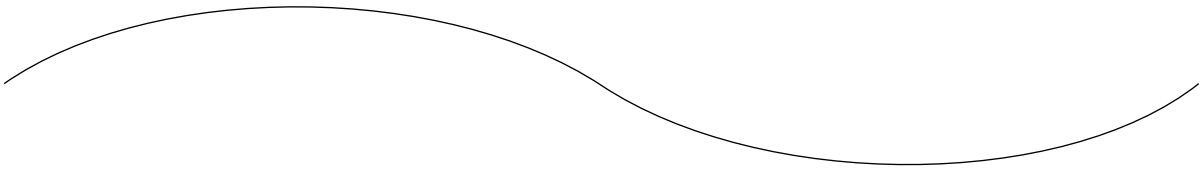
Group Directory P1 for FX-056VP (Except ODA)

GROUP DIRECTORY P2

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

LOCATION ID		LOCATION ID	
141 =	KAI-EIGYOU-INTL	142 =	KAI-EIGYOU-GBR
143 =	KAI-EIGYOU-NOR	144 =	KAI-EIGYOU-SWE
145 =	KAI-EIGYOU-DEN	146 =	KAI-EIGYOU-GER
147 =	KAI-EIGYOU-TCH	148 =	KAI-EIGYOU-POL
149 =	KAI-EIGYOU-AUT	150 =	KAI-EIGYOU-BEL
151 =	KAI-EIGYOU-FRE	152 =	KAI-EIGYOU-ESP
153 =	KAI-EIGYOU-GRE	154 =	KAI-EIGYOU-AUS
155 =	KAI-EIGYOU-SIN	156 =	KAI-EIGYOU-HNG
157 =	KAI-SISYA-INTL	158 =	KAI-SISYA-GBR
159 =	KAI-SISYA-NOR	160 =	KAI-SISYA-SWE
161 =	KAI-SISYA-DEN	162 =	KAI-SISYA-GER
163 =	KAI-SISYA-TCH	164 =	KAI-SISYA-POL
165 =	KAI-SISYA-AUT	166 =	KAI-SISYA-BEL
167 =	KAI-SISYA-FRE	168 =	KAI-SISYA-ESP
169 =	KAI-SISYA-GRE	170 =	KAI-SISYA-AUS
171 =	KAI-SISYA-SIN	172 =	KAI-SISYA-HNG
173 =	OKI DATA USA	174 =	OKI DATA INTL
175 =	OKI DATA GBR	176 =	OKI DATA IRL
177 =	OKI DATA NOR	178 =	OKI DATA SWE



181 =	ABCDEFGHIJ12345	182 =	ABCDEFGHIJ23456
183 =	ABCDEFGHIJ34567	184 =	ABCDEFGHIJ45678
185 =	ABCDEFGHIJ56789	186 =	ABCDEFGHIJ67890
187 =	ABCDEFGHIJ78901	188 =	ABCDEFGHIJ89012
189 =	ABCDEFGHIJ90123	190 =	ABCDEFGHIJ01234

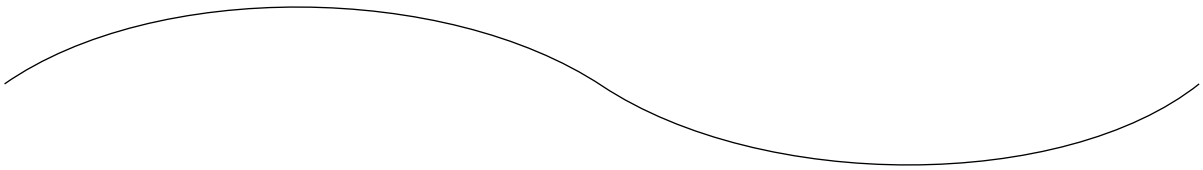
Group Directory P2 for FX-056VP (Except ODA)

GROUP DIRECTORY P1

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

	LOCATION ID		LOCATION ID
1 =	12345678901234567890123456789012345678901234567890	2 =	12345678901234567890123456789012345678901234567890
3 =	OKI-SHIBAURA	4 =	OKI-SHIBAURA
5 =	FX-050	6 =	FX-175
7 =	FX-0175VP-ENHANC	8 =	FX-056
9 =	OKIFAX450	10 =	OKIFAX460M
11 =	M125INTL	12 =	M125-US
13 =	OKIFAX5600	14 =	OKIFAX1050
15 =	OKIFAX1000	16 =	OKIFAX2200
17 =	OF-3GX	18 =	115AD
19 =	2275	20 =	OF-8
21 =	OF-18	22 =	OF-58H
23 =	M4200	24 =	5400
25 =	OF-28	26 =	OF-1
27 =	OF-21	28 =	2127
29 =	OF-12M	30 =	OF-55M
31 =	M5600	32 =	ABCDEFGHIJKLMNO
33 =	OKIDATA-0000	34 =	OKIDATA-0001
35 =	OKIDATA-0003	36 =	OKIDATA-0004
37 =	OKIDATA-0006	38 =	OKIDATA-0007
39 =	OKIDATA-0009	40 =	OKIDATA-000A



101 =	OKIDATA-0001	102 =	OKIDATA-0002
103 =	OKIDATA-0003	104 =	OKIDATA-0004
105 =	OKIDATA-0005	106 =	OKIDATA-0006
107 =	OKIDATA-0007	108 =	OKIDATA-0008
109 =	OKIDATA-0009	110 =	OKIDATA-000A
111 =	OKIDATA-000B	112 =	OKIDATA-000C
113 =	OKIDATA-000D	114 =	OKIDATA-000E
115 =	OKIDATA-000F	116 =	OKIDATA-0010
117 =	OKIDATA-0011	118 =	OKIDATA-0012
119 =	OKIDATA-0013	120 =	OKIDATA-0014
121 =	OKIDATA-0015	122 =	OKIDATA-0016
123 =	OKIDATA-0017	124 =	OKIDATA-0018
125 =	OKIDATA-0019	126 =	OKIDATA-001A
127 =	OKIDATA-001B	128 =	OKIDATA-001C
129 =	OKIDATA-001D	130 =	OKIDATA-001E
131 =	OKIDATA-001F	132 =	OKIDATA-0020
133 =	OKIDATA-0021	134 =	OKIDATA-0022
135 =	OKIDATA-0023	136 =	OKIDATA-0024
137 =	OKIDATA-0025	138 =	OKIDATA-0026
139 =	OKIDATA-0027	140 =	OKIDATA-0028

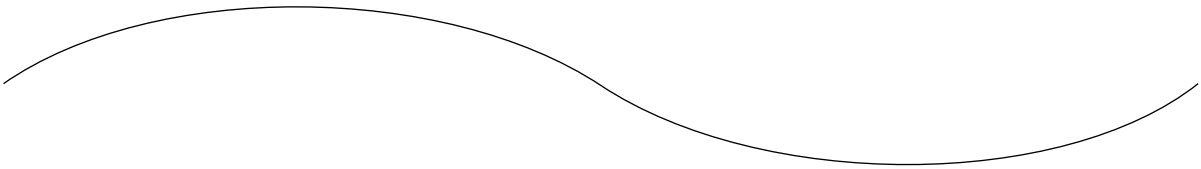
Group Directory P1 for FX-176VP

GROUP DIRECTORY P2

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

LOCATION ID		LOCATION ID	
141 =	KAI-EIGYOU-INTL	142 =	KAI-EIGYOU-GBR
143 =	KAI-EIGYOU-NOR	144 =	KAI-EIGYOU-SWE
145 =	KAI-EIGYOU-DEN	146 =	KAI-EIGYOU-GER
147 =	KAI-EIGYOU-TCH	148 =	KAI-EIGYOU-POL
149 =	KAI-EIGYOU-AUT	150 =	KAI-EIGYOU-BEL
151 =	KAI-EIGYOU-FRE	152 =	KAI-EIGYOU-ESP
153 =	KAI-EIGYOU-GRE	154 =	KAI-EIGYOU-AUS
155 =	KAI-EIGYOU-SIN	156 =	KAI-EIGYOU-HNG
157 =	KAI-SISYA-INTL	158 =	KAI-SISYA-GBR
159 =	KAI-SISYA-NOR	160 =	KAI-SISYA-SWE
161 =	KAI-SISYA-DEN	162 =	KAI-SISYA-GER
163 =	KAI-SISYA-TCH	164 =	KAI-SISYA-POL
165 =	KAI-SISYA-AUT	166 =	KAI-SISYA-BEL
167 =	KAI-SISYA-FRE	168 =	KAI-SISYA-ESP
169 =	KAI-SISYA-GRE	170 =	KAI-SISYA-AUS
171 =	KAI-SISYA-SIN	172 =	KAI-SISYA-HNG
173 =	OKI DATA USA	174 =	OKI DATA INTL
175 =	OKI DATA GBR	176 =	OKI DATA IRL
177 =	OKI DATA NOR	178 =	OKI DATA SWE



221 =	ABCDEFGHIJ12345	222 =	ABCDEFGHIJ23456
223 =	ABCDEFGHIJ34567	224 =	ABCDEFGHIJ45678
225 =	ABCDEFGHIJ56789	226 =	ABCDEFGHIJ67890
227 =	ABCDEFGHIJ78901	228 =	ABCDEFGHIJ89012
229 =	ABCDEFGHIJ90123	230 =	ABCDEFGHIJ01234

Group Directory P2 for FX-176VP

GROUP DIRECTORY

07/01/2001 17:04
ID=OKI TAKASAKI

GROUP NO. #1=OKI DATA SYS1

	LOCATION ID		LOCATION ID
1 =	12345678901234567890123456789012345678901234567890	50 =	12345678901234567890123456789012345678901234567890
100 =	OKI-SHIBAURA		

Group Directory (When the destination of SPEED DIAL No. 1, No.50,and No.100 is selected by the group designation.)

1.6.6 Self Diagnosis Report

Purpose: To check ROMs, RAMs and Printing function
Method: The report will be manually printed out for maintenance purpose.

1.6.6.1 Difference from FX-056e/176e

1.6.6.2 Report Image

SELF DIAGNOSIS REPORT

07/01/2001 12:00
ID=0dc Takasaki

MAIN BOARD				
	CPU-ROM	VERSION	aaaa	
		HASH	OK	hhhh
	CPU-RAM		OK	
	PROGRAM1	VERSION	aaaa	
		HASH	OK	hhhh
	PROGRAM2	VERSION	aaaa	
		HASH	OK	hhhh
	LANGUAGE	VERSION	aaaa	
		HASH	OK	hhhh
	DEFAULT	VERSION	aaaa	
		HASH	OK	hhhh
	DEFAULT	TYPE	01	
	MODEM	VERSION	hhhh	
	RAM1	8M	OK	
	RAM2		OK	
	CARTRIDGE (TONER/ID)		bbbb/bbbb	
	OPT-MEM	2M	OK	
DEVICE ID	FX-176VP			
HSP	TYPE2		OK	
G3 OPTION BOARD				OK
	CPU-ROM	VERSION	aaaa	
		HASH	OK	hhhh
	CPU-RAM		OK	
	PROGRAM	VERSION	aaaa	
		HASH	OK	hhhh
	RAM	2M	OK	
	DPRAM	2K	OK	
	MODEM	VERSION	hhhh	

(When all description conditions are met.)

1.6.7 G3 Protocol Dump

Purpose:
To allow the serviceman to obtain a list of protocol signals transferred between the transmitter and receiver.

Method:
The report will be manually printed out for maintenance purpose. If the previous communication is G3, G3 communication protocol dump is printed out. If it is G4, the G4 communication protocol dump is printed.

1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Date of communication
5. Time of communication
6. One message transmission/reception time
7. Identification of remote station * CSI and/or telephone number
8. Mode of transmission/reception according to ITU-T designation
9. Total number of pages in communication
10. Identification of the result of the communication
11. Department Code (D. CODE)
    *1: Only when DEPARTMENT CODE = ON.
12. Service code
13. TX: DIS/DTC/DCS/NSF/NSS/NSC
14. Transmitted telephone number
15. Transmitted SEP/SUB
16. Transmitted SID
17. Common information of ITU-T V.34 TX/RX
18. Modem trace
19. RX: DIS/DTC/DCS/NSF/NSS/NSC (page2)
20. Received telephone number (page2)
21. Received SEP/SUB (page2)
22. Received SID
23. Common information of ITU-T V.34 TX/RX (page2)
24. Modem trace (page2)

1.6.7.1 Difference from FX-056e/176e

*1: Displays D. CODE when DEPARTMENT CODE = ON.
*2: Displays the Service Code Title (S.C.).

PROTOCOL DUMP P1

```
                                                    07/01/2001  19:00                  *1
                                                    ID=OKI   TAKASAKI

DATE    TIME       S,R-TIME       DISTANT  STATION ID              MODE     PAGES    RESULT    D.CODE   S.C.   *1
12/24   18:56      00'33"         12345678901234567890123456      TX         002    OK        [01]     0000 # *2


FCF
TX |          NSS     PPS_MPS     PPS_EOP     DCN
RX | NSF DIS      CFR          MCF          MCF

TX |
RX |

TX |
RX |

TX |
RX |

TX |
RX |

TX |
RX |


TRANSMITTED FRAME

DIS
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

DTC
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

DCS
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

NSF
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

NSS
FF C8 C4 00 00 84 80 30 40 E4 10 40 B8 39 20 0C 0C 0C 0C 30 82 4A AA 82 42 92 12 CA 04 92 D2 F2
80 40 80 10 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

NSC
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

CSI/CIG/TSI
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

SEP/SUB
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

SID
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

V34
CM
00 00 00 00
JM
00 00 00 00

SYMBOL  RATE(SPS)            =
DATA SIGNALLING RATE(BPS)    =

MODEM TRACE
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Protocol Dump Image (page 1)

PROTOCOL DUMP P2

07/01/2001 19:00
ID=OKI TAKASAKI

```
RECEIVED FRAME

DIS
FF C8 01 00 73 17 22 00 00 00 00 00 00 00 00 00 00 00 00

DTC
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

DCS
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

NSF
FF C0 04 00 00 84 80 08 40 F4 10 40 F9 7D 20 0C 0C 0C 0C 90 F2 52 72 F2 12 04 92 D2 F2 80 F0 80
40 80 50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

NSS
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

NSC
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

CSI/CIG/TSI
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

SEP/SUB
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

SID
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

V34
CM
00 00 00 00 00 00
JM
00 00 00 00 00 00
```

Protocol Dump Image (page 2)

1.6.8 G4 Protocol Dump

Purpose:
To allow the serviceman to obtain a list of protocol signals transferred between the transmitter and receiver.

Method:
The report will be manually printed out for maintenance purpose.
If it is G4, the G4 communication protocol dump is printed out.

Descriptions:
1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Date of communication
5. Time of communication
6. One message transmission/reception time
7. Identification of remote station *CSI and/or telephone number
8. Mode of transmission/reception according to ITU-T designation
9. Total number of pages in communication
10. Identification of the result of the communication
11. Department Code (D. CODE)
    * Only when the setting is DEPARTMENT CODE = ON
12. Service code
13. D channel
14. B channel
15. COMMN MODE
16. COMMN SPEED
17. FLOW CONTROL PARAM.
18. TID
19. SETUP
20. DISC
21. CR/CN, CA/CC, CQ/CI, RQ/RI, SQ/SI
22. TBR/TCC/TCR/TCA
23. CSS
24. RSSP/RSSN
25. CD/CL
26. RDCLP
27. CDS
28. CDUI

PROTOCOL DUMP P1

```
                                                    07/01/2001  19:00                    *1
                                                    ID=OKI TAKASAKI                    /
DATE    TIME      S,R-TIME      DISTANT STATION ID      MODE    PAGES   RESULT  D.CODE  S.C.   *1
12/24   18:56     00'33"        OKI SIBAURA             TX-G4     002   OK      [01]    0000

Dch.
TX | SETUP                    CONN-ACK + Bch + DISC   REL-C
RX |      STATUS SETUP-ACK CONN         + Bch +     REL

TX |
RX |

Bch.
TX | SABM  WQ  CR  TCR   CSS    CDCL      CDUI CDPB      CDUI CDPB      DUI
RX |     UA  SF  CC   TCA   RSSP     RDCLP           RDPBP           RDPBP

TX | CDE    CQ  DISC
RX |    RDEP  CF    UA

TX |
RX |

TX |
RX |


COMMN MODE
T.90

COMMN SPEED
64kbps

FLOW CONTROL PARAM.
2048(SPS)/7(SWS)/2048(RPS)/7(RWS)

TID
081-0273242117=OKIFAX

SETUP
08 01 05 05 01 02 88 90 6C 02 00 80 70 0B 80 30 32 37 33 32 38 30 30 30 31 7C 03 88 90 A9 7D 02
91 A1 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

DISC
45 16
```

Protocol Dump P1 (G4 option)

PROTOCOL DUMP P2

07/01/2001 19:00
ID=OKI TAKASAKI

```
CR/CN
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00

CA/CC
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00

CQ/CI
00 00 00 00 00

RQ/RI
00 00 00 00 00

SQ/SI
00 00 00 00 00

TBR
00

TCC
00

TCR
09 E0 00 00 00 01 00 C0 01 0R 00 00 00 00 00 00

TCA
09 D0 00 01 00 01 00 C0 01 0R 00 00 00 00 00 00

CSS
0D 6F 01 2A 0A 18 30 38 31 2D 3D 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 0B 0E
39 37 2D 30 38 2D 32 37 2D 31 34 2D 31 34 02 03 0E 01 01 08 01 01 C1 08 A4 06 80 01 02 81 01 00
E8 2F 00 01 79 00 E0 1C C1 10 50 61 6E 61 66 61 78 20 55 46 2D 12 38 30 20 20 C2 02 36 35 C4 04
30 30 30 30 E1 0B E0 06 C0 01 01 C1 01 01 C1 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

RSSP/RSSN
0E 69 01 2A 09 18 30 38 31 2D 3D 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 0B 0E
39 38 2D 30 36 2D 30 32 2D 31 33 3A 34 36 02 03 0E 01 01 08 01 01 C1 08 A1 06 80 01 02 81 01 00
E8 29 00 01 79 00 E0 16 C1 10 50 61 6E 61 66 61 78 20 55 46 2D 42 38 30 20 20 C2 02 36 35 E1 0B
E0 06 C0 01 01 C1 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

CDCL
3E 58 12 01 3C C1 4D A4 4B 80 01 02 81 01 00 A2 3C A2 32 30 08 80 02 26 C0 81 02 36 CE 30 08 80
02 2F 6D 81 02 13 2C 30 08 80 02 2F 6C 81 02 43 2C 30 08 80 02 2E 23 81 02 41 25 30 08 80 02 36
CE 81 02 4D 80 A1 06 8B 01 04 8B 01 01 E4 05 E1 03 C0 01 01 E8 04 00 01 49 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

RDCLP
3E 40 C1 3E A4 3C 80 01 02 81 01 00 A2 25 A2 1E 30 08 80 02 26 C0 80 02 36 CE 30 08 80 02 2F 6C
81 02 13 2C 30 08 80 02 2F 6D 81 02 13 2C A4 03 8B 01 04 E4 0D E0 06 02 01 02 02 01 03 E1 03 C0
01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

CDS
2D 40 29 03 30 30 31 C1 39 A1 37 80 01 02 81 01 00 A2 28 A2 1E 30 08 80 02 26 C0 81 02 36 CE 30
08 80 02 2F 6D 81 02 43 2C 30 08 80 02 2F 6C 81 02 13 2C A4 06 8B 01 04 8B 01 01 E4 05 E1 03 C0
01 01 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

CDUI
01 00 A2 03 02 01 00 A2 1B 02 01 02 31 16 A1 08 80 02 26 C0 81 02 36 CE A6 05 A1 03 82 01 01 E9
03 C0 01 00 A3 80 31 06 A2 04 80 02 06 C0 24 80 04 82 07 90 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Protocol Dump P2 (G4 option)

1.6.9 Relay Broadcast Confirmation

Method:
The report will be sent out upon return when the distribution is completed.

Descriptions:

1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Total numbers of pages in particular communication
5. Specified transmission time (Time is not printed by automatic print out mode.)
6. Total transmission time
7. Required transmission address (Speed dial)
8. Registered location ID (Speed dial) or Identification of the remote station.
9. Required transmission address (Ten key dial)
10. Transmitted number or pages for each address
11. Identification of the result of communication

The report format for the confirmation of relay broadcast and printing by own station represents the modification of the title only of “1.6.17 Broadcast Confirmation Report” for automatic output as stated below:
“BROADCAST CONFIRMATION REPORT” to “RELAY BROADCAST CONFIRMATION”

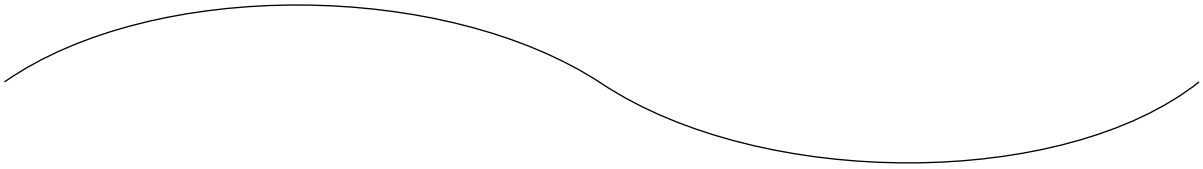
Only FX-176VP can send or locally print the Relay Broadcast Confirmation Report.

RELAY BROADCAST CONFIRMATION P1

12/24/2000 19:22
ID=OKI

PAGES = 001
START TIME = 12/24 17:22
TOTAL TIME = 1:22'22"

LOCATION ID	PAGES	RESULT	LOCATION ID	PAGES	RESULT
1=OKIDATA SYS1	001	OK	2=OKI DATA SYS2	001	OK
3=OKIDATA SYS3	001	OK	4=OKI DATA SYS4	001	OK
5=OKIDATA SYS5	001	OK	6=OKI DATA SYS6	001	OK
7=OKIDATA SYS7	001	OK	8=OKI DATA SYS8	001	OK
9=OKIDATA SYS9	001	OK	10=OKI DATA SYS10	001	OK
11=OKIDATA SYS11	001	OK	12=OKI DATA SYS12	001	OK
13=OKIDATA SYS13	001	OK	14=OKI DATA SYS14	001	OK
15=OKIDATA SYS15	001	OK	16=OKI DATA SYS16	001	OK
17=OKIDATA SYS17	001	OK	18=OKI DATA SYS18	001	OK
19=OKIDATA SYS19	001	OK	20=OKI DATA SYS20	001	OK
21=OKIDATA SYS21	001	OK	22=OKI DATA SYS22	001	OK
23=OKIDATA SYS23	001	OK	24=OKI DATA SYS24	001	OK
25=OKIDATA SYS25	001	OK	26=OKI DATA SYS26	001	OK
27=OKIDATA SYS27	001	OK	28=OKI DATA SYS28	001	OK
29=OKIDATA SYS29	001	OK	30=OKI DATA SYS30	001	OK
31=OKIDATA SYS31	001	OK	32=OKI DATA SYS32	001	OK
33=OKIDATA SYS33	001	OK	34=OKI DATA SYS34	001	OK
35=OKIDATA SYS35	001	OK	36=OKI DATA SYS36	001	OK
37=OKIDATA SYS37	001	OK	38=OKI DATA SYS38	001	OK
39=OKIDATA SYS39	001	OK	40=OKI DATA SYS40	001	OK



93=OKIDATA SYS93	001	OK	94=OKI DATA SYS94	001	OK
95=OKIDATA SYS95	001	OK	96=OKI DATA SYS96	001	OK
97=OKIDATA SYS97	001	OK	98=OKI DATA SYS98	001	OK
99=OKIDATA SYS99	001	OK	100=OKI DATA SYS100	001	OK
101=OKIDATA SYS101	001	OK	102=OKI DATA SYS102	001	OK
103=OKIDATA SYS103	001	OK	104=OKI DATA SYS104	001	OK
105=OKIDATA SYS105	001	OK	106=OKI DATA SYS106	001	OK
107=OKIDATA SYS107	001	OK	108=OKI DATA SYS108	001	OK
109=OKIDATA SYS109	001	OK	110=OKI DATA SYS110	001	OK
111=OKIDATA SYS111	001	OK	112=OKI DATA SYS112	001	OK
113=OKIDATA SYS113	001	OK	114=OKI DATA SYS114	001	OK
115=OKIDATA SYS115	001	OK	116=OKI DATA SYS116	001	OK
117=OKIDATA SYS117	001	OK	118=OKI DATA SYS118	001	OK
119=OKIDATA SYS119	001	OK	120=OKI DATA SYS120	001	OK
121=OKIDATA SYS121	001	OK	122=OKI DATA SYS122	001	OK
123=OKIDATA SYS123	001	OK	124=OKI DATA SYS124	001	OK
125=OKIDATA SYS125	001	OK	126=OKI DATA SYS126	001	OK
127=OKIDATA SYS127	001	OK	128=OKI DATA SYS128	001	OK
129=OKIDATA SYS129	001	OK	130=OKI DATA SYS130	001	OK
131=OKIDATA SYS131	001	OK	132=OKI DATA SYS132	001	OK
133=OKIDATA SYS133	001	OK	134=OKI DATA SYS134	001	OK
135=OKIDATA SYS135	001	OK	136=OKI DATA SYS136	001	OK
137=OKIDATA SYS137	001	OK	138=OKI DATA SYS138	001	OK
139=OKIDATA SYS139	001	OK	140=OKI DATA SYS140	001	OK

Relay Broadcast Confirmation Report P1 for FX-176VP

RELAY BROADCAST CONFIRMATION P2

12/24/2000 19:22
ID=OKI

LOCATION ID	PAGES	RESULT	LOCATION ID	PAGES	RESULT
141=OKIDATA SYS141	001	OK	142=OKI DATA SYS142	001	OK
143=OKIDATA SYS143	001	OK	144=OKI DATA SYS144	001	OK
145=OKIDATA SYS145	001	OK	146=OKI DATA SYS146	001	OK
147=OKIDATA SYS147	001	OK	148=OKI DATA SYS148	001	OK
149=OKIDATA SYS149	001	OK	150=OKI DATA SYS150	001	OK
151=OKIDATA SYS151	001	OK	152=OKI DATA SYS152	001	OK
153=OKIDATA SYS153	001	OK	154=OKI DATA SYS154	001	OK
155=OKIDATA SYS155	001	OK	156=OKI DATA SYS156	001	OK
157=OKIDATA SYS157	001	OK	158=OKI DATA SYS158	001	OK
159=OKIDATA SYS159	001	OK	160=OKI DATA SYS160	001	OK
161=OKIDATA SYS161	001	OK	162=OKI DATA SYS162	001	OK
163=OKIDATA SYS163	001	OK	164=OKI DATA SYS164	001	OK
165=OKIDATA SYS165	001	OK	166=OKI DATA SYS166	001	OK
167=OKIDATA SYS167	001	OK	168=OKI DATA SYS168	001	OK
169=OKIDATA SYS169	001	OK	170=OKI DATA SYS170	001	OK
171=OKIDATA SYS171	001	OK	172=OKI DATA SYS172	001	OK
173=OKIDATA SYS173	001	OK	174=OKI DATA SYS174	001	OK
175=OKIDATA SYS175	001	OK	176=OKI DATA SYS176	001	OK
177=OKIDATA SYS177	001	OK	178=OKI DATA SYS178	001	OK
179=OKIDATA SYS179	001	OK	180=OKI DATA SYS180	001	OK
181=OKIDATA SYS181	001	OK	182=OKI DATA SYS182	001	OK
183=OKIDATA SYS183	001	OK	184=OKI DATA SYS184	001	OK
185=OKIDATA SYS185	001	OK	186=OKI DATA SYS186	001	OK
187=OKIDATA SYS187	001	OK	188=OKI DATA SYS188	001	OK
189=OKIDATA SYS189	001	OK	190=OKI DATA SYS190	001	OK
191=OKIDATA SYS191	001	OK	192=OKI DATA SYS192	001	OK
193=OKIDATA SYS193	001	OK	194=OKI DATA SYS194	001	OK
195=OKIDATA SYS195	001	OK	196=OKI DATA SYS196	001	OK
197=OKIDATA SYS197	001	OK	198=OKI DATA SYS198	001	OK
199=OKIDATA SYS199	001	OK	200=OKI DATA SYS200	001	OK
201=OKIDATA SYS201	001	OK	202=OKI DATA SYS202	001	OK
203=OKIDATA SYS203	001	OK	204=OKI DATA SYS204	001	OK
205=OKIDATA SYS205	001	OK	206=OKI DATA SYS206	001	OK
207=OKIDATA SYS207	001	OK	208=OKI DATA SYS208	001	OK
209=OKIDATA SYS209	001	OK	210=OKI DATA SYS210	001	OK
211=OKIDATA SYS211	001	OK	212=OKI DATA SYS212	001	OK
213=OKIDATA SYS213	001	OK	214=OKI DATA SYS214	001	OK
215=OKIDATA SYS215	001	OK	216=OKI DATA SYS216	001	OK
217=OKIDATA SYS217	001	OK	218=OKI DATA SYS218	001	OK
219=OKIDATA SYS219	001	OK	220=OKI DATA SYS220	001	OK
221=OKIDATA SYS221	001	OK	222=OKI DATA SYS222	001	OK
223=OKIDATA SYS223	001	OK	224=OKI DATA SYS224	001	OK
225=OKIDATA SYS225	001	OK	226=OKI DATA SYS226	001	OK
227=OKIDATA SYS227	001	OK	228=OKI DATA SYS228	001	OK
229=OKIDATA SYS229	001	OK	230=OKI DATA SYS230	001	OK

Relay Broadcast Confirmation Report P2 for FX-176VP

RELAY BROADCAST CONFIRMATION

12/24/2000 19:22
ID=OKI

PAGES = 001
START TIME = 12/24 17:22
TOTAL TIME = 1:22'22"

LOCATION ID	PAGES	RESULT	LOCATION ID	PAGES	RESULT
1=12345678901234567890	001	OK	50=OKI DATA SYS2	001	OK
100=OKIDATA SYS3					

Relay Broadcast Confirmation Report
(When the destination is specified by SPEED DIAL No.1, No.50, and No.100)

1.6.10 Internet Fax Reception Error Report (Error Mail Report)

Alarm MCF will be output upon interruption of the reception if a file not printable by the international fax is included (always output irrespective of the setting).
Descriptions of the content of communication are same as for the Reception of Internet FAX of (1), (3)-(5) of " 1.6.11 Activity Report"

*1: Displays D. CODE when DEPARTMENT CODE = ON.

ERROR MAIL REPORT

07/01/2001 13:00
ID=Oki Data

*1

DATE	TIME	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	D.CODE	S.C.
17/02	12:50	00'20"	abc@fax.okidata.co.jp	IFAX-RX	001	NG	[01]	E100

1.6.11 Activity Report

Purpose:
To provide the user with a comprehensive communication record listing for her/his administrative or management purposes. But in memory RX, result of the communication is always printed in the report.

Method:
The report will be manually printed out, and provides a record of fax machine's last 50 communications.

Descriptions:
1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. Total TX and total RX
5. Date of transmission or reception
6. Time when the communication started
7. Length of time for which the OKIFAX 5750/5950 was connected to the line
8. Identification of the remote station
   Personal ID/CSI (TSI)/Location ID/Dial number/Called TID/Calling TID
9. Mode of the communication
   TX/RX (Memory reception)/CONT=XX, XX=Box No. (Confidential reception)/
   B.C(Broadcast TX)/POLL TX/POLL RX/POLL=XX, XX=Box No.(Bulletin Poll TX)/TX-G4/
   FWD-T, FWD-R, Batch
   For detail, see section 1.6.23
10. Total number of pages (000-999)
11. Result of the communication
    OK/NO/STOP/BUSY/PAPER/COMP(Complection of broadcast)/S JAM/R JAM/COVER/
    CANCEL
12. Department Code (D. CODE)
    * Only when the setting is DEPARTMENT CODE = ON
13. Service code

1.6.11.1 Difference from FX-056e/176e

(1) Lists the contents of 50 communications at max.
(2) Lists D. CODE when DEPARTMENT CODE = ON.
(3) Displays the Service Code Title (S.C.).

ACTIVITY REPORT

07/01/2001 17:05
ID=OKI

TOTAL TIME TX=08:22' RX=17:39′

*1

DATE	TIME	S,R-TIME	DISTANT STAITON ID	MODE	PAGES	RESULT	D.CODE	S.C.
12/15	10:10	00′00″	123456789012345678901234	TX	000	NO	[01]	90C1
12/15	10:30	00′00″	ODS TAKASAKI	TX	000	STOP	[01]	9080
12/15	12:05	01′20″	OKI FAX	TX	000	STOP	[05]	9080
12/15	13:00	00′20″	03-5476-4300	TX	000	NO	·	90C1
12/15	15:40	03′25″	ODS TAKASAKI	CONF=01	003	OK	·	0000*1
12/22	10:00	00′00″	OKI FAX		001	OK	·	0000*2
12/22	10:00	02′00″	OKI SHIBAURA	RX	005	NO	·	908E
12/22	10:22	00′12″	0495-22-5400	TX	000	STOP	·	9080
12/22	10:50	00′20″	0495-22-5400	RX	003	NO	·	9090
12/22	12:05	00′20″	OKI FAX	TX	000	STOP	·	9080
12/22	15:00	01′30″		RX	003	OK	·	0000*3
12/22	15:30	00′20″		TX	001	OK	·	0000
12/22	17:05	00′20″		B.C.		COMP.	·	60A0*4
12/22	19:04	00′20″	03-5476-4300	TX	000	STOP	·	9080
12/23	09:00	01′11″	Oki Data	TX-G4	002	OK	·	0000*5
12/23	10:20	00′20″	03-5476-4300	POLLED	003	OK	·	9080*6
12/23	10:35	02′23″		CONF=01	002	OK	·	0000
12/23	10:35	02′23″		RX	002	OK	·	0000
12/24	13:00	00′20″	03-5476-4300		004	NO	·	9082
12/24	10:36	01′10″	ODS FUKUSHIMA	POLL=01	002	OK	·	0000*7
12/24	13:00	01′00″	OKI DATA SYS	POLLED	001	OK	[01]	0000

*1: Confidential reception
*2: Manual TX
*3: Memory reception
*4: Broadcast TX
*5: G4 TX
*6: Polling TX
*7: Bulletin poll TX

Activity Report

1.6.12 Message Confirmation

Pupose:
To check the result of transmission just conducted or previous done.

Method:
The report will be manually or automatically printed out.

Description:

1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. Total TX and total RX time
5. Date of transmission or reception
6. Time when the communication started
7. Length of time for which the OKIFAX 5750/5950 was connected to the line
8. Identification of the remote station
   Personal ID/CSI(TSI)/Location ID/Dial number/Called TID/Calling TID
9. Mode of the communication
   CALLING/CALLED (Memory reception)/CONT=XX, XX=Box No. (Confidential reception)/ B.C(Broadcast TX)/POLLED(Polling TX)/POLL=XX, XX=Box No.(Bulletin Poll TX)/ CALLING G4(G4 TX)/FWD-T, FWD-R, Batch
10. Total number of pages (000-999)
11. Result of the communication
    OK/NO/STOP/BUSY/PAPER/COMP(Complection of broadcast)/S JAM/R JAM/COVER/ CANCEL
12. Department Code (D. CODE)
    * Only when the setting is DEPARTMENT CODE = ON
13. Service code
14. Message
15. (Error report)
    - Number of pages stored in memory
      Page number is printed only in case transmission from memory is carried out.
    - Page numbers of the pages to which an RTN signal or PIN signal received.
      The asterisk (*) mark indicates that retransmission of the page met the criteria of copy quality.

1.6.12.1 Difference from FX-056e/176e

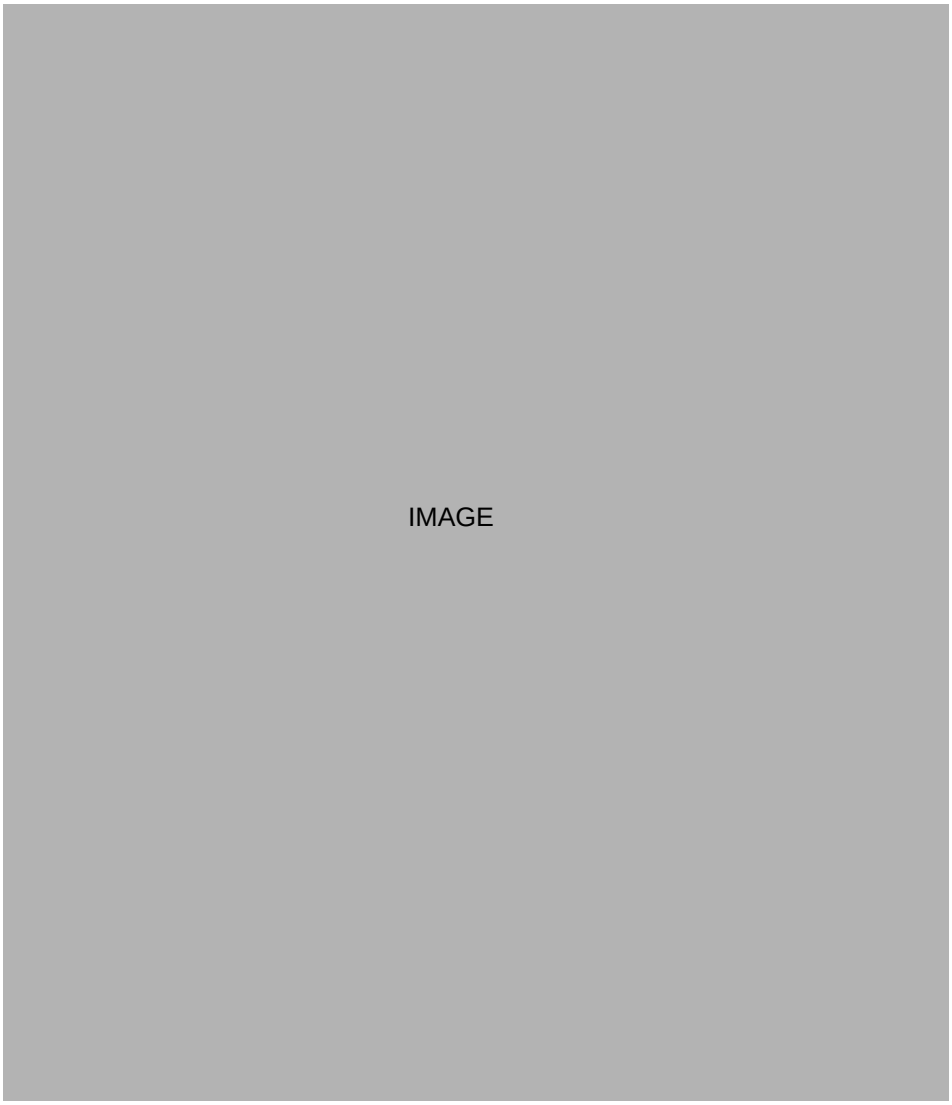
(1) Lists the code (D. CODE) when DEPARTMENT CODE = ON.
(2) Displays the Service Code Title (S.C.).
(3) Displays the full 1st page of the Image (Message) reduced in the secondary scanning direction.

MESSAGE CONFIRMATION

07/01/2001 17:05
ID=OKI

*1

DATE	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	D.CODE	S.C.
12/24	0'20"	12345678901234567890 1234	TX	002	OK	[01]	0000



Message Confirmation (When the transmission is the normal end)

Printed only when Error page

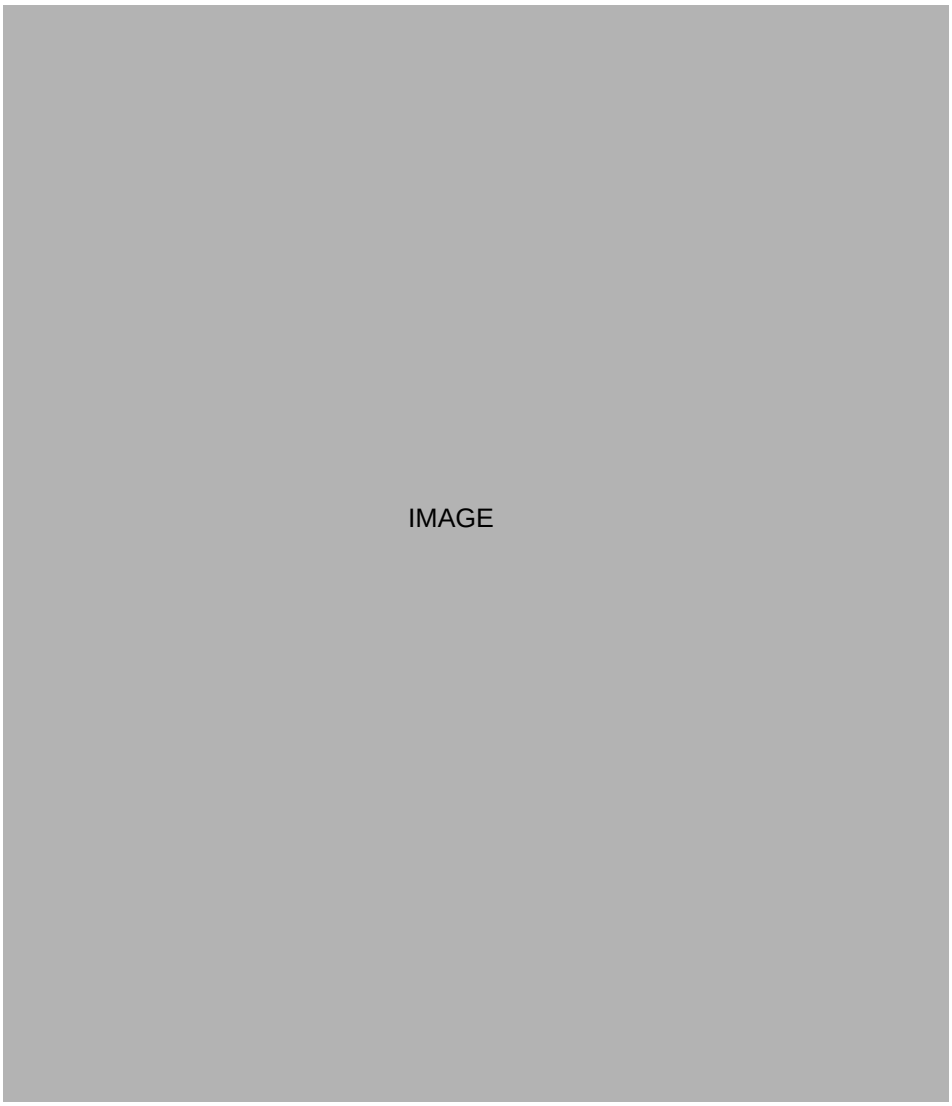
MESSAGE CONFIRMATION

07/01/2001 17:05
ID=OKI

*1

DATE	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	D.CODE	S.C.
12/24	0'20"	12345678901234567890123 4	TX	002	OK	[01]	0000

POSSIBLE_ERROR_PAGE:*001*002



Message Confirmation (Error report)

1.6.13 Power Outage Report

Purpose:
To indicate AC power failure and recovery and in case of destruction of accumulated picture data in the memory. the information printed on the Power Outage Report is not printed out on the Activity report.

Method:
If received communications are lost due to power failure, this report is output automatically at power recovery.

Descriptions:
1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. Reserved/transmission date
5. Reserved/transmission time
6. Communication time
7. Identification of the remote station
8. Mode of the communication
   CONF(Confidential reception)/RX(Memory reception)/B.C(Broadcast TX)
9. Total number of reserved documents or transmitted pages
10. Result of the communication
    LOST
11. Department Code (D. CODE)
    * Only when the setting is DEPARTMENT CODE = ON
12. Service code

1.6.13.1 Difference from FX-056e/176e

Same as “1.6.11 Activity Report.”

POWER OUTAGE REPORT

*1

07/01/2001 15:10
ID=OKI

DATE	TIME	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	D.CODE	S.C
12/24	10:10		12345678901234567890123 4			LOST	[01]	
12/24	10:30		ODS TAKASAKI		003	LOST	[01]	
12/24	12:05	01'20"	OKI FAX	CONF=01	003	LOST	[05]	0000
12/24	13:00	00'20"	03-5476-4300	RX	001	LOST		0000
12/24	10:50	00'20"	0495-22-5400	RX	003	LOST		0000
12/24	15:00			B.C.	001	LOST	[01]	

Power Outage Report

1.6.14 Confidential RX Report

Purpose:
To inform the operator about a stored confidential message in the memory

Method:
The report will be automatically printed out.

Descriptions:
1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. Date of transmission or reception
5. Time when the communication started
6. Length of time for which the FX-056VP/176VP was connected to the line
7. Identification of the remote station
8. Mode of the communication
   The stored confidential box number is printed in the MODE column.
   CONF=01(box number)
9. Total number of pages
10. Result of the communication
11. Service code

1.6.14.1 Difference from FX-056e/176e

Displays the Service Code Title (S.C.).

CONFIDENTIAL RX REPORT

07/01/2001 17:05
ID=OKI

DATE	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT	S.C.
12/24	01'30"	12345678901234567890123 4	CONF=01	002	OK	0000

Confidential RX Report

1.6.15 Active Memory File

Method:
The report will be manually or automatically printed out for information of transmission/reception data stored in the memory. When there is no stored image data in the memory at all, the Active Memory Files is not printed out.

Descriptions:
1. Title of the report
2. Date and time when the report was printed.
3. Sender ID
4. RECEPTION (Memory reception)
   - Prints the information of no paper/no toner reception
   - Enters is the number of received communication times stored in the memory.
   - Pages is the number of total pages of the reception messages stored in the memory.
5. TRANSMISSION (Delayed transmission, standby of redial)
   - Prints the information of Delay memory transmission and Redial. However, Polling RX information is printed out on the below item 6.
   - Prints the communication date and time, distant station ID, Mode and Pages
   - Department Code (D. CODE)
     * Only when the setting is DEPARTMENT CODE = ON
6. POLLING TX/RX
   - Prints the information of Polling RX or Polling TX of used Box.
   - Polling TX prints Mode column and number of read pages.
     When Feeder Polling TX, the number of read pages is a blank.
   - Polling RX prints the communication date and time, distant station ID and Mode.
   - Department Code (D. CODE)
     * Only when the setting is DEPARTMENT CODE = ON
7. PERSONAL BOX (Confidential, Bulletin Poll)
   - Prints the opened condition of Personal Box.
   - Mode shows the type of Box.
   - Enters prints the number of receipt times stored in the memory.
   - Pages prints the number of total pages of each Box.
   - Department Code (D. CODE)
     * Only when the setting is DEPARTMENT CODE = ON

1.6.15.1 Difference from FX-056e/176e

When the setting is DEPARTMENT CODE = ON then the code (D.CODE) will be recorded.

ACTIVE MEMORY FILES P1

12/24/2000 19:10
ID=ODS

RECEPTION

ENTRIES	PAGES
05	020

TRANSMISSION

DATE	TIME	DISTANT STATION ID	MODE	PAGES	D.CODE *1
12/24	13:00	OKI DATA SYS-1	TX	003	[01]
12/24	12:03	OKI DATA SYS-2	TX	001	[01]
12/24	13:00	OKI DATA SYS-3	TX	002	[05]
12/24	13:05	OKI DATA SYS-4	TX	002	.
12/24	14:00	OKI DATA SYS-5	TX	002	.
12/24	14:30	OKI DATA SYS-6	TX	002	.
12/24	15:10	OKI DATA SYS-7	TX	002	.
12/24	15:15	OKI DATA SYS-8	TX	002	.
12/24	15:30	OKI DATA SYS-9	TX	002	.
12/24	15:50	OKI DATA SYS-10	TX	002	.
12/24	16:10	OKI DATA SYS-11	TX	002	.
12/24	16:30	OKI DATA SYS-12	TX	002	.
12/24	16:50	OKI DATA SYS-13	TX	002	.
12/24	17:00	OKI DATA SYS-14	TX	002	.
12/24	17:10	OKI DATA SYS-15	TX	002	.
12/24	17:30	OKI DATA SYS-16	TX	002	.
12/24	17:42	OKI DATA SYS-17	TX	002	.
12/24	17:50	OKI DATA SYS-18	TX	002	.
12/24	17:59	OKI DATA SYS-19	TX	002	.
12/24	18:00	OKI DATA SYS-20	TX	002	.
12/24	18:10	OKI DATA SYS-21	TX	002	.
12/24	18:20	OKI DATA SYS-22	TX	002	.
12/24	18:20	OKI DATA SYS-23	TX	002	.
12/24	18:20	OKI DATA SYS-24	TX	002	.
12/24	18:30	OKI DATA SYS-25	TX	002	.
12/24	18:32	OKI DATA SYS-26	TX	002	.
12/24	18:35	OKI DATA SYS-27	TX	002	.
12/24	18:40	OKI DATA SYS-28	TX	002	.
12/24	18:42	OKI DATA SYS-29	TX	002	.
12/24	18:45	OKI DATA SYS-30	TX	002	.
12/24	18:50	OKI DATA SYS-31	TX	002	.
12/24	18:52	OKI DATA SYS-32	TX	002	.
12/24	18:53	OKI DATA SYS-33	TX	002	.
12/24	18:55	OKI DATA SYS-34	TX	002	.
12/24	18:57	OKI DATA SYS-35	TX	002	.
12/24	18:59	OKI DATA SYS-36	TX	002	.
12/24	19:00	OKI DATA SYS-37	TX	002	.
12/24	19:00	OKI DATA SYS-38	TX	002	[01]

POLLING TX/RX

DATE	TIME	DISTANT STATION ID	MODE	PAGES	D.CODE
			POLLED	003	[02]
12/24	12:05	123456789012345678901234	POLLING		[01]

Active Memory Files P1 (In case of more than 1 page)

ACTIVE MEMORY FILES P2

```
                                                    12/24/2000 19:10
                                                    ID=ODS
                                                              *1
PERSONAL BOX
  BOX NO.      MODE       ENTRIES        PAGES       D.CODE
   01          CONF         03            020         [01]
   02          CONF         01            002         [02]
   03          CONF         01            005           .
   04          CONF         01            005           .
   05          POLL         01            005           .
   06          POLL         01            005           .
   07          POLL         01            005           .
   08          POLL         01            005           .
   09          POLL         01            005           .
   10          POLL         01            005           .
   11          POLL         01            005           .
   12          POLL         01            005           .
   13          POLL         01            005           .
   14          POLL         01            005           .
   15          POLL         01            005           .
   16          POLL         01            005         [05]
```

Active Memory Files P2 (In case of more than 1 page)

ACTIVE MEMORY FILES

12/24/2000 19:10
ID=ODS

RECEPTION

ENTRIES	PAGES
05	020

TRANSMISSION

DATE	TIME	DISTANT STATION ID	MODE	PAGES	D.CODE
12/24	13:00	OKI DATA SYS-1	TX	003	[01]
12/24	15:30	OKI DATA SYS-9	TX	002	[02]
12/24	15:50	OKI DATA SYS-10	TX	002	.
12/24	16:10	OKI DATA SYS-11	TX	002	.
12/24	16:30	OKI DATA SYS-12	TX	002	.
12/24	16:50	OKI DATA SYS-13	TX	002	.
12/24	18:52	OKI DATA SYS-32	TX	002	.
12/24	18:53	OKI DATA SYS-33	TX	002	[01]

POLLING TX/RX

DATE	TIME	DISTANT STATION ID	MODE	PAGES	D.CODE
			POLLED	003	[01]
12/24	12:05	12345678901234567890 1234	POLLING		[01]

PERSONAL BOX

BOX NO.	MODE	ENTRIES	PAGES	D.CODE
01	CONF	03	020	[02]
02	CONF	01	002	[03]
03	CONF	01	005	.
04	CONF	01	005	.
05	POLL	01	005	.
06	POLL	01	005	.
07	POLL	01	005	.
08	POLL	01	005	.
14	POLL	01	005	.
15	POLL	01	005	.
16	POLL	01	005	[01]

Active Memory Files (In case of within 1 page)

1.6.16 Broadcast Entry Report

Method:
The report will be manually or automatically printed out.

Descriptions:
1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. T.37-related registration/setting contents (only when the T.37 Function is enabled)
   - SUBJECT
   - FROM
   - SEND FILE FORMAT
   - SENDER ID
   - RETURN RECEIPT
5. Required transmission address (Speed dial)
6. Registered location ID
7. Required transmission address (Ten key dial)

1.6.16.1 Difference from FX-056e/176e

(1) Includes both FAX numbers and Email addresses in one page. (only when T.37 Function is enabled)
(2) Indicates the registration/setting contents of the items below when the T.37 Function is enabled (or when the LAN Board TYPE2 is mounted).
   - SUBJECT
   - FROM
   - SEND FILE FORMAT
   - SENDER ID
   - RETURN RECEIPT
(3) Changed the wording, KEYPAD → MANUAL.
(4) Increased the maximum MANUAL registration number from 10 to 20 items.

BROADCAST ENTRY REPORT P1

07/01/2001 17:04
ID=OKI TAKASAKI

```
SUBJECT           = File transfer
FROM              = s-ishika@okidata.co.jp
SEND FILE FORMAT  = TIFF
SENDER ID         = ON
RETURN RECEIPT    = OFF
```

*1: Indicated only when the T.37 Function is enabled (or when the LAN Board TYPE2 is mounted).

LOCATION ID	LOCATION ID
1=12345678901234567890123456789012345678901234567890	2=12345678901234567890123456789012345678901234567890
3=OKI-SHIBAURA	4=OKI-SHIBAURA
5=FX-050	6=FX-175
7=FX-175VP-ENHANC	8=FX-056
9=OKIFAX450	10=OKIFAX460M
11=M125INTL	12=M125-US
13=OKIFAX5600	14=OKIFAX1050
15=OKIFAX1000	16=OKIFAX2200
17=OF-3GX	18=115AD
19=2275	20=OF-8
21=OF-18	22=OF-58H
23=M4200	24=5400
25=OF-2B	26=OF-1
27=OF-21	28=2127
29=OF-12M	30=OF-55M
31=M5600	32=ABCDEFGHIJKLMNO
33=OKIDATA-0000	34=OKIDATA-0001
35=OKIDATA-0003	36=OKIDATA-0004
37=OKIDATA-0006	38-OKIDATA-0007
39=OKIDATA-0009	40=OKIDATA-000A

101=OKIDATA-0001	102=OKIDATA-0002
103=OKIDATA-0003	104=OKIDATA-0004
105=OKIDATA-0005	106=OKIDATA-0006
107=OKIDATA-0007	108=OKIDATA-0008
109=OKIDATA-0009	110=OKIDATA-000A
111=OKIDATA-000B	112=OKIDATA-000C
113=OKIDATA-000D	114=OKIDATA-000E
115=OKIDATA-000F	116=OKIDATA-0010
117=OKIDATA-0011	118=OKIDATA-0012
119=OKIDATA-0013	120=OKIDATA-0014
121=OKIDATA-0015	122=OKIDATA-0016
123=OKIDATA-0017	124=OKIDATA-0018
125=OKIDATA-0019	126=OKIDATA-001A
127=OKIDATA-001B	128=OKIDATA-001C
129=OKIDATA-001D	130=OKIDATA-001E
131=OKIDATA-001F	132=OKIDATA-0020
133=OKIDATA-0021	134=OKIDATA-0022
135=OKIDATA-0023	136=OKIDATA-0024
137=OKIDATA-0025	138=OKIDATA-0026
139=OKIDATA-0027	140=OKIDATA-0028

Broadcast Entry Report for FX-056VP (ODA) (1/2)

BROADCAST ENTRY REPORT P2

07/01/2001 17:04
ID=OKI TAKASAKI

LOCATION ID

MANUAL

12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890

Broadcast Entry Report for FX-056VP (ODA) (2/2)

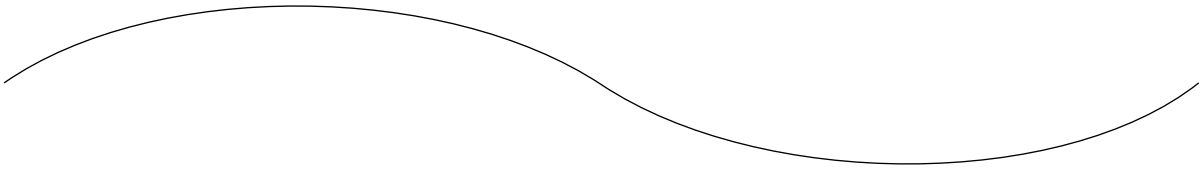
BROADCAST ENTRY REPORT P1

07/01/2001 17:04
ID=OKI TAKASAKI

```
SUBJECT           = File transfer
FROM              = s-ishika@okidata.co.jp
SEND FILE FORMAT  = TIFF
SENDER ID         = ON
RETURN RECEIPT    = OFF
```

*1: Indicated only when the T.37 Function is enabled (or when the LAN Board TYPE2 is mounted).

LOCATION ID	LOCATION ID
1=12345678901234567890123456789012345678901234567890	2=12345678901234567890123456789012345678901234567890
3=OKI-SHIBAURA	4=OKI-SHIBAURA
5=FX-050	6=FX-175
7=FX-175VP-ENHANC	8=FX-056
9=OKIFAX450	10=OKIFAX460M
11=M125INTL	12=M125-US
13=OKIFAX5600	14=OKIFAX1050
15=OKIFAX1000	16=OKIFAX2200
17=OF-3GX	18=115AD
19=2275	20=OF-8
21=OF-18	22=OF-58H
23=M4200	24=5400
25=OF-2B	26=OF-1
27=OF-21	28=2127
29=OF-12M	30=OF-55M
31=M5600	32=ABCDEFGHIJKLMNO
33=OKIDATA-0000	34=OKIDATA-0001
35=OKIDATA-0003	36=OKIDATA-0004
37=OKIDATA-0006	38-OKIDATA-0007
39=OKIDATA-0009	40=OKIDATA-000A



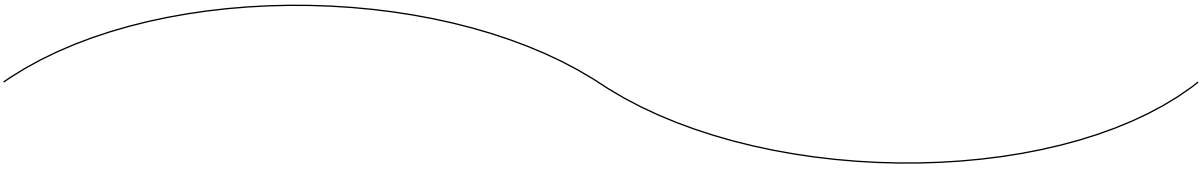
101=OKIDATA-0001	102=OKIDATA-0002
103=OKIDATA-0003	104=OKIDATA-0004
105=OKIDATA-0005	106=OKIDATA-0006
107=OKIDATA-0007	108=OKIDATA-0008
109=OKIDATA-0009	110=OKIDATA-000A
111=OKIDATA-000B	112=OKIDATA-000C
113=OKIDATA-000D	114=OKIDATA-000E
115=OKIDATA-000F	116=OKIDATA-0010
117=OKIDATA-0011	118=OKIDATA-0012
119=OKIDATA-0013	120=OKIDATA-0014
121=OKIDATA-0015	122=OKIDATA-0016
123=OKIDATA-0017	124=OKIDATA-0018
125=OKIDATA-0019	126=OKIDATA-001A
127=OKIDATA-001B	128=OKIDATA-001C
129=OKIDATA-001D	130=OKIDATA-001E
131=OKIDATA-001F	132=OKIDATA-0020
133=OKIDATA-0021	134=OKIDATA-0022
135=OKIDATA-0023	136=OKIDATA-0024
137=OKIDATA-0025	138=OKIDATA-0026
139=OKIDATA-0027	140=OKIDATA-0028

Broadcast Entry Report for FX-056VP (Except ODA) (1/2)

BROADCAST ENTRY REPORT P2

07/01/2001 17:04
ID=OKI TAKASAKI

LOCATION ID	LOCATION ID
141=KAI-EIGYOU-INTL	142=KAI-EIGYOU-GBR
143=KAI-EIGYOU-NOR	144=KAI-EIGYOU-SWE
145=KAI-EIGYOU-DEN	146=KAI-EIGYOU-GER
147=KAI-EIGYOU-TCH	148=KAI-EIGYOU-POL
149=KAI-EIGYOU-AUT	150=KAI-EIGYOU-BEL
151=KAI-EIGYOU-FRE	152=KAI-EIGYOU-ESP
153=KAI-EIGYOU-GRE	154=KAI-EIGYOU-AUS
155=KAI-EIGYOU-SIN	156=KAI-EIGYOU-HNG
157=KAI-SISYA-INTL	158=KAI-SISYA-GBR
159=KAI-SISYA-NOR	160=KAI-SISYA-SWE
161=KAI-SISYA-DEN	162=KAI-SISYA-GER
163=KAI-SISYA-TCH	164=KAI-SISYA-POL
165=KAI-SISYA-AUT	166=KAI-SISYA-BEL
167=KAI-SISYA-FRE	168=KAI-SISYA-ESP
169=KAI-SISYA-GRE	170=KAI-SISYA-AUS
171=KAI-SISYA-SIN	172=KAI-SISYA-HNG
173=OKI DATA USA	174=OKI DATA INTL
175=OKI DATA BGR	176=OKI DATA IRL
177=OKI DATA NOR	178=OKI DATA SWE



181=ABCDEFGHIJ12345	182=ABCDEFGHIJ23456
183=ABCDEFGHIJ34567	184=ABCDEFGHIJ45678
185=ABCDEFGHIJ56789	186=ABCDEFGHIJ67890
187=ABCDEFGHIJ78901	188=ABCDEFGHIJ89012
189=ABCDEFGHIJ90123	190=ABCDEFGHIJ01234

MANUAL

12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890

Broadcast Entry Report for FX-056VP (Except ODA) (2/2)

BROADCAST ENTRY REPORT P1

07/01/2001 17:04
ID=OKI TAKASAKI

```
SUBJECT           = File transfer
FROM              = s-ishika@okidata.co.jp
SEND FILE FORMAT  = TIFF
SENDER ID         = ON
RETURN RECEIPT    = OFF
```

*1: Indicated only when the T.37 Function is enabled (or when the LAN Board TYPE2 is mounted).

LOCATION ID	LOCATION ID
1=12345678901234567890123456789012345678901234567890	2=12345678901234567890123456789012345678901234567890
3=OKI-SHIBAURA	4=OKI-SHIBAURA
5=FX-050	6=FX-175
7=FX-175VP-ENHANC	8=FX-056
9=OKIFAX450	10=OKIFAX460M
11=M125INTL	12=M125-US
13=OKIFAX5600	14=OKIFAX1050
15=OKIFAX1000	16=OKIFAX2200
17=OF-3GX	18=115AD
19=2275	20=OF-8
21=OF-18	22=OF-58H
23=M4200	24=5400
25=OF-2B	26=OF-1
27=OF-21	28=2127
29=OF-12M	30=OF-55M
31=M5600	32=ABCDEFGHIJKLMNO
33=OKIDATA-0000	34=OKIDATA-0001
35=OKIDATA-0003	36=OKIDATA-0004
37=OKIDATA-0006	38-OKIDATA-0007
39=OKIDATA-0009	40=OKIDATA-000A

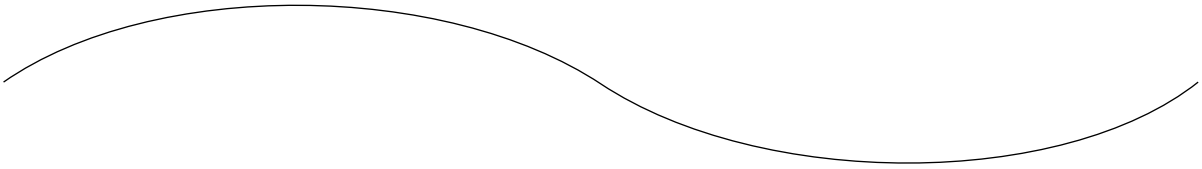
101=OKIDATA-0001	102=OKIDATA-0002
103=OKIDATA-0003	104=OKIDATA-0004
105=OKIDATA-0005	106=OKIDATA-0006
107=OKIDATA-0007	108=OKIDATA-0008
109=OKIDATA-0009	110=OKIDATA-000A
111=OKIDATA-000B	112=OKIDATA-000C
113=OKIDATA-000D	114=OKIDATA-000E
115=OKIDATA-000F	116=OKIDATA-0010
117=OKIDATA-0011	118=OKIDATA-0012
119=OKIDATA-0013	120=OKIDATA-0014
121=OKIDATA-0015	122=OKIDATA-0016
123=OKIDATA-0017	124=OKIDATA-0018
125=OKIDATA-0019	126=OKIDATA-001A
127=OKIDATA-001B	128=OKIDATA-001C
129=OKIDATA-001D	130=OKIDATA-001E
131=OKIDATA-001F	132=OKIDATA-0020
133=OKIDATA-0021	134=OKIDATA-0022
135=OKIDATA-0023	136=OKIDATA-0024
137=OKIDATA-0025	138=OKIDATA-0026
139=OKIDATA-0027	140=OKIDATA-0028

Broadcast Entry Report for FX-176VP (1/2)

BROADCAST ENTRY REPORT P2

07/01/2001 17:04
ID=OKI TAKASAKI

LOCATION ID	LOCATION ID
141=KAI-EIGYOU-INTL	142=KAI-EIGYOU-GBR
143=KAI-EIGYOU-NOR	144=KAI-EIGYOU-SWE
145=KAI-EIGYOU-DEN	146=KAI-EIGYOU-GER
147=KAI-EIGYOU-TCH	148=KAI-EIGYOU-POL
149=KAI-EIGYOU-AUT	150=KAI-EIGYOU-BEL
151=KAI-EIGYOU-FRE	152=KAI-EIGYOU-ESP
153=KAI-EIGYOU-GRE	154=KAI-EIGYOU-AUS
155=KAI-EIGYOU-SIN	156=KAI-EIGYOU-HNG
157=KAI-SISYA-INTL	158=KAI-SISYA-GBR
159=KAI-SISYA-NOR	160=KAI-SISYA-SWE
161=KAI-SISYA-DEN	162=KAI-SISYA-GER
163=KAI-SISYA-TCH	164=KAI-SISYA-POL
165=KAI-SISYA-AUT	166=KAI-SISYA-BEL
167=KAI-SISYA-FRE	168=KAI-SISYA-ESP
169=KAI-SISYA-GRE	170=KAI-SISYA-AUS
171=KAI-SISYA-SIN	172=KAI-SISYA-HNG
173=OKI DATA USA	174=OKI DATA INTL
175=OKI DATA BGR	176=OKI DATA IRL
177=OKI DATA NOR	178=OKI DATA SWE



221=ABCDEFGHIJ12345	222=ABCDEFGHIJ23456
223=ABCDEFGHIJ34567	224=ABCDEFGHIJ45678
225=ABCDEFGHIJ56789	226=ABCDEFGHIJ67890
227=ABCDEFGHIJ78901	228=ABCDEFGHIJ89012
229=ABCDEFGHIJ90123	230=ABCDEFGHIJ01234

MANUAL

12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890
12345678901234567890123456789012345678901234567890

Broadcast Entry Report for FX-176VP (2/2)

BROADCAST ENTRY REPORT

```
                                                        07/01/2001  17:04
                                                        ID=OKI TAKASAKI

  SUBJECT           = File transfer
  FROM              = s-ishika@okidata.co.j
  SEND FILE FORMAT  = TIFF
  SENDER ID         = ON
  RETURN RECEIPT    = OFF

     LOCATION ID                                        LOCATION ID

  1=12345678901234567890123456789012345678901     50=12345678901234567890123456789012345678901
100=OKI-SHIBAURA


KEYPAD

         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
         12345678901234567890123456789012345678901
```

*1: Indicated only when the T.37 Function is enabled (or when the LAN Board TYPE2 is mounted).

Broadcast Entry Report (When the destination of Broadcast TX is specified by SPEED DIAL No.1, No.50, and No.100)

1.6.17 Broadcast Confirmation Report

Method:
The report will be manually or automatically printed out.

Descriptions:

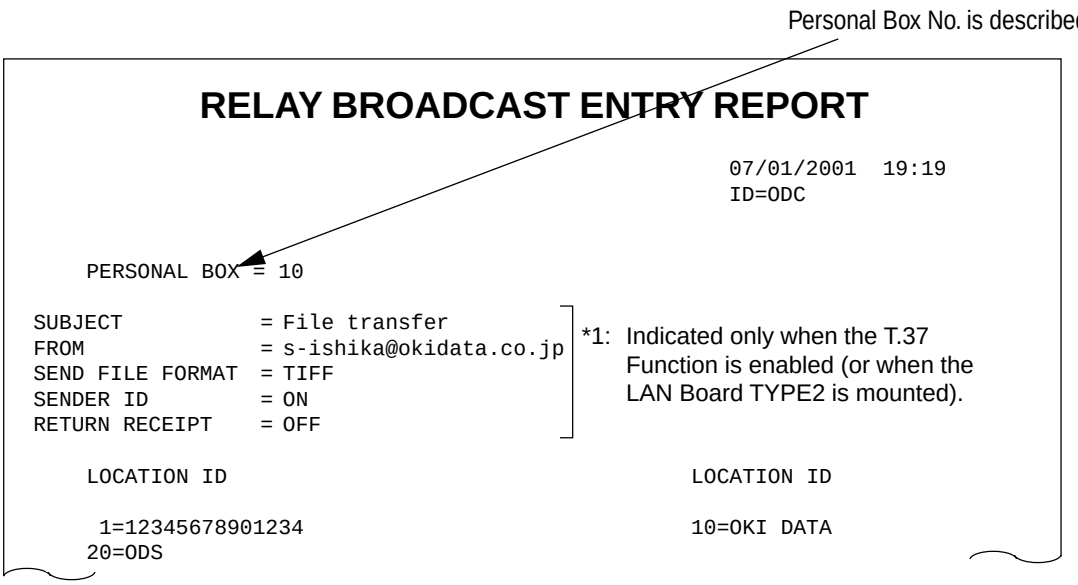
1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Total numbers of pages in particular communication
5. Specified transmission time
   (Time is not printed by automatic print out mode.)
6. Total transmission time
7. Required transmission address (Speed dial)
8. Registered location ID (Speed Dial) or Identification of the remote station.
9. Required transmission address (Ten key dial)
10. Transmitted number or pages for each address
11. Identification of the result of communication
12. Department Code (D.CODE)
    * Only when the setting is DEPARTMENT CODE = ON

Descriptions enabled of Email address for Internet FAX and Fax2Net specified to Speed Dial 001 to 050 (FX-056VP), 001 to 090 (FX-176VP) and LOCATION ID column of the keypad.

- Character string containing the lower-case alphabetic characters and symbols
- Speed Dial: Descriptions of maximum 24 characters. If exceeding 24 characters, description starts from the top.
  Keypad: All 64 characters enabled
- Since simultaneous transmission of Internet FAX effects transmission to respective addresses at one time, the result will be either all OK or failure (NG).

1.6.18 Relay Broadcast Entry Report

When the relay personal box is opened, the relay broadcast entry report can be output in the specified operation of the delivery address. (Format is the same as the conventional broadcast entry report but the following description only deffers.)



1.6.19 G3 Log Report

Newly outputs debug log information by the firm of G3 option board.
Report format is identical with MCNT and the log information by the firm of G4 option.

1.6.20 NIC Configuration

Refer to the “Internet FAX System Specifications.”

1.6.20.1 NIC Configuration (TYPE 1 OEL)

NIC CONFIGURATION

```
                                                    07/01/2001  19:11
                                                    ID=OKIDATA CORP.

MLETB08 Version 1.0.2
TCP/IP status
   IP address      : 202.250.103.63
   Subnet Mask     : 255.255.255.0
   Gateway addr    : 202.250.103.254
NetWare status
   NWPrint mode: Failed
EtherTalk status
   Zone Name   : *
   Type Name   : LaserWriter
   Object Name : ML1E7750
NetBEUI status
   Computer Name  : ML1E7750
   Workgroup Name : PrintServer
   Master Browser : ?????

MAC Address    : 00:80:92:1E:63:FE
```

1.6.20.2 NIC Configuration (TYPE 1 ODA)

NIC CONFIGURATION P1

```
                                                    05/09/2001  19:05
                                                    ID=OKIDATA\CORP.

+-------------------------------------------------------------------------------+
|   General Infomation                                                          |
+-------------------------------------------------------------------------------+
  Network Card Name        : OkiLAN 7100e+
  MAC Address              : 0080921E63FE        Firmware Version  : 1.1.0
  Link Status              : OK (10BASE-T   Half)
  Network Status
  Unicast Packets Received : 6              Packets Transmitted : 3427
  Total Packets Received   : 28689          Unsendable Packets  : 0
  Bad Packets Received     : 0

  Frame Type               :

+-------------------------------------------------------------------------------+
|   TCP/IP Configuration                          Status: Enable                |
+-------------------------------------------------------------------------------+
  DHCP/BOOTP        : OFF
  RARP              : OFF
  IP Address        : 202.250.103.63   Web Address     http://202.250.103.63
  Subnet Mask       : 255.255.255.0
  Default Gateway   : 202.250.103.254

+-------------------------------------------------------------------------------+
|   NetWare Configuration                         Status: Enable                |
+-------------------------------------------------------------------------------+
  Network No                  : 10200840
  Printer Name                : okifax176VP-prn1
  NetWare Mode                : Queue Server
  P-Server ------------------------------------------------------ Status -------
    Print Server Name         : okifax176VP
    Password                  :
    Job Polling Rate          : 4 Sec
    [NDS]
        Tree Name             :
        Context Name          :
    [Bindery]
        File Server 1 Name    : OKIDATA                          Not Connected
  R-Printer ----------------------------------------------------- Status -------
    Job timeout               : 10 Sec

+-------------------------------------------------------------------------------+
|   EtherTalk Configuration                        Status: Enable               |
+-------------------------------------------------------------------------------+
  Printer Name                : ML1E7750
  Type Name                   : Laser Writer
  Zone Name                   : *
  Address                     : 99999             Node          : 136
```

NIC CONFIGURATION P2

05/09/2001 19:05
ID=OKIDATA\CORP.

NetBEUI Configuration	Status: Enable

Computer Name	: ML1E7750		
Workgroup Name	: PrintServer		
Master Browser	: ?????		

SNMP Configuration			
Trap Community Name	: public		
Authen Community Name	: ******		
ColdStart Trap	: Disable	Authentic Trap	: Disable
Trap Distination	:		

1.6.20.3 NIC Configuration (TYPE 2 OEL)

NIC CONFIGURATION P1

```
                                                    05/09/2001  19:19
                                                    ID=OKIDATA\CORP.

+-------------------------------------------------------------------------------+
|   General Infomation                                                          |
+-------------------------------------------------------------------------------+
  Network Card Name        : MLETB08
  MAC Address              : 0080921E63FE        Firmware Version  : 2.0.1
  Link Status              : OK (10BASE-T   Half)
  Network Status
  Unicast Packets Received : 7              Packets Transmitted : 6378
  Total Packets Received   : 193980         Unsendable Packets  : 0
  Bad Packets Received     : 0

  Frame Type               : Automatic

+-------------------------------------------------------------------------------+
|   TCP/IP Configuration                          Status: Enable                |
+-------------------------------------------------------------------------------+
  DHCP/BOOTP        : OFF
  RARP              : OFF
  IP Address        : 202.250.103.63   Web Address     http://202.250.103.63
  Subnet Mask       : 255.255.255.0
  Default Gateway   : 202.250.103.254
  DNS Server (Primary)      : 202.250.103.255
  DNS Server (Secondary)    : 0.0.0.0

+-------------------------------------------------------------------------------+
|   NetWare Configuration                         Status: Disable               |
+-------------------------------------------------------------------------------+
  Network No                : 00000000
  Printer Name              : 176VP
  NetWare Mode              : Queue Server
  P-Server ------------------------------------------------------ Status -------
    Print Server Name       : ifax176VPsrv
    Password                :
    Job Polling Rate        : 4 Sec
    [NDS]
        Tree Name           :
        Context Name        :
    [Bindery]
        File Server 1 Name  : OKIDATA                          Not Connected
  R-Printer ----------------------------------------------- Status -------
    Job timeout             : 10 Sec

+-------------------------------------------------------------------------------+
|   EtherTalk Configuration                        Status: Disable              |
+-------------------------------------------------------------------------------+
  Printer Name              : ML0012F9
  Type Name                 : Laser Writer
  Zone Name                 : *
```

NIC CONFIGURATION P2

```
                                                  05/09/2001  19:05
                                                  ID=OKIDATA\CORP.
  Address                  :               Node         :

+-------------------------------------------------------------------------------+
|   NetBEUI Configuration                            Status: Enable             |
+-------------------------------------------------------------------------------+
  Computer Name            : ML0012F9
  Workgroup Name           : PrintServer
  Master Browser           : ML0012F9

+-------------------------------------------------------------------------------+
|   SNMP Configuration                                                          |
+-------------------------------------------------------------------------------+
  Trap Community Name      : public
  Authen Community Name    : ******
  ColdStart Trap           : Enable        Authentic Trap      : Enable
  Trap Distination         : 202.250.103.63

+-------------------------------------------------------------------------------+
|   Internet Configuration                                                      |
+-------------------------------------------------------------------------------+
  SMTP Server              : mail.taka.okidata.co.jp
  POP3 Server              : mail.taka.okidata.co.jp
  POP3 Server UserID       : ifax176VP
  POP3 Server Password     : ********
  Host Name                : p21aa37t
  E-mail Address           : ifax176VP@okidata.co.jp
  SMTP Transmit            : Enable         SMTP Receive       : Enable
  POP3                     : Enable         DSN                : Disable
  SMTP Port Number         : 25             POP3 Port Number   : 110
  User APOP                : NO
```

1.6.20.4 NIC Configuration (TYPE 2 ODA)

NIC CONFIGURATION P1

```
                                                    05/09/2001  19:23
                                                    ID=OKIDATA\CORP.

+-------------------------------------------------------------------------------+
|   General Infomation                                                          |
+-------------------------------------------------------------------------------+
  Network Card Name        : OkiLAN 7100e+
  MAC Address              : 0080921E63FE        Firmware Version  : 2.0.1A
  Link Status              : OK (10BASE-T   Half)
  Network Status
  Unicast Packets Received : 9              Packets Transmitted : 6378
  Total Packets Received   : 168217         Unsendable Packets  : 0
  Bad Packets Received     : 0

  Frame Type               : Automatic

+-------------------------------------------------------------------------------+
|   TCP/IP Configuration                          Status: Enable                |
+-------------------------------------------------------------------------------+
  DHCP/BOOTP        : OFF
  RARP              : OFF
  IP Address        : 202.250.103.63   Web Address     http://202.250.103.63
  Subnet Mask       : 255.255.255.0
  Default Gateway   : 202.250.103.254
  DNS Server (Primary)      : 202.250.103.255
  DNS Server (Secondary)    : 0.0.0.0

+-------------------------------------------------------------------------------+
|   NetWare Configuration                         Status: Disable               |
+-------------------------------------------------------------------------------+
  Network No                : 00000000
  Printer Name              : 176VP
  NetWare Mode              : Queue Server
  P-Server ------------------------------------------------------ Status -------
    Print Server Name       : ifax176VPsrv
    Password                :
    Job Polling Rate        : 4 Sec
    [NDS]
        Tree Name           :
        Context Name        :
    [Bindery]
        File Server 1 Name  : OKIDATA                          Not Connected
  R-Printer ----------------------------------------------------- Status -------
    Job timeout             : 10 Sec

+-------------------------------------------------------------------------------+
|   EtherTalk Configuration                        Status: Disable              |
+-------------------------------------------------------------------------------+
  Printer Name              : ML0012F9
  Type Name                 : Laser Writer
  Zone Name                 : *
```

NIC CONFIGURATION P2

```
                                                  05/09/2001  19:05
                                                  ID=OKIDATA\CORP.
  Address                  :               Node         :

+-------------------------------------------------------------------------------+
|   NetBEUI Configuration                          Status: Enable               |
+-------------------------------------------------------------------------------+
  Computer Name            : ML0012F9
  Workgroup Name           : PrintServer
  Master Browser           : ML0012F9

+-------------------------------------------------------------------------------+
|   SNMP Configuration                                                          |
+-------------------------------------------------------------------------------+
  Trap Community Name      : public
  Authen Community Name    : ******
  ColdStart Trap           : Enable        Authentic Trap      : Enable
  Trap Distination         : 202.250.103.63

+-------------------------------------------------------------------------------+
|   Internet Configuration                                                      |
+-------------------------------------------------------------------------------+
  SMTP Server              : mail.taka.okidata.co.jp
  POP3 Server              : mail.taka.okidata.co.jp
  POP3 Server UserID       : ifax176VP
  POP3 Server Password     : ********
  Host Name                : p21aa37t
  E-mail Address           : ifax176VP@okidata.co.jp
  SMTP Transmit            : Enable         SMTP Receive       : Enable
  POP3                     : Enable         DSN                : Disable
  SMTP Port Number         : 25             POP3 Port Number   : 110
  User APOP                : NO
```

1.6.21 NIC TEST PRINT

1.6.21.1 NIC TEST PRINT (TYPE 1 OEL)

```
EthernetBoard MLETB08 Version 1.0.2
Copyright 1999(C) Oki Data Corporation
Copyright 1999(C) Japan Computer Industry Inc.

*** Configuration report ***
TCP/IP protocol                 :ENABLE
IP address                      :202.250.103.64
Subnet Mask                     :255.255.255.0
Gateway address                 :202.250.103.254
RARP protocol                   :DISABLE
DHCP/BOOTP protocol             :DISABLE
root password                   :""
Authentic community             :"******"
Trap community                  :"public"
Trap address                    :0.0.0.0
SysContact                      :""
SysName                         :""
SysLocation                     :""
DefaultTTL                      :255
EnableAuthenTrap                :2
NetWare protocol                :ENABLE
Packet type                     :EUC
NetWare mode                    :PSERVER
FSERVER name 1                  :"OKIDATA"
FSERVER name 2                  :""
FSERVER name 3                  :""
FSERVER name 4                  :""
FSERVER name 5                  :""
FSERVER name 6                  :""
FSERVER name 7                  :""
FSERVER name 8                  :""
Machine name                    :"FX-176VP"
Password                        :""
Job polling interval            :4
Bindery mode                    :ENABLE
NDS tree                        :""
NDS context                     :""
PSERVER name 1                  :""
PSERVER name 2                  :""
PSERVER name 3                  :""
PSERVER name 4                  :""
PSERVER name 5                  :""
PSERVER name 6                  :""
PSERVER name 7                  :""
PSERVER name 8                  :""
Job timeout                     :10
EtherTalk protocol              :ENABLE
Zone name                       :"*"
NetBEUI protocol                :ENABLE
Computer name                   :"ML1E7750"
Workgroup name                  :"PrintServer"
Comment                         :"EthernetBoard MLETB08"
NetWare port name               :"FX-176-prn1"
EtherTalk port name             :"ML1E7750"
BOJ string                      :""
EOJ string                      :""
BOJ string(euc/sjis)            :""
EOJ string(euc/sjis)            :"\x04"
Printer type                    :PS
TAB size   (char.)              :8
Pass width (char.)              :78
Pass length(line)               :66
lpr/ftp banner                  :NO
Prn-Trap community              :"public"
TCP#1 Trap enable               :DISABLE
On-line trap                    :DISABLE
Off-line trap                   :DISABLE
```

```
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#1 Trap address            :0.0.0.0
TCP#2 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#2 Trap address            :0.0.0.0
TCP#3 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#3 Trap address            :0.0.0.0
TCP#4 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#4 Trap address            :0.0.0.0
TCP#5 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#5 Trap address            :0.0.0.0
IPX   Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
IPX   Trap address            :"000000000000"
IPX   Trap net                :"00000000"
```

1.6.21.2 NIC TEST PRINT (TYPE 1 ODA)

```
EthernetBoard MLETB08 Version 1.1.0
Copyright 1999(C) Oki Data Corporation
Copyright 1999(C) Japan Computer Industry Inc.

*** Configuration report ***
TCP/IP protocol                 :ENABLE
IP address                      :202.250.103.63
Subnet Mask                     :255.255.255.0
Gateway address                 :202.250.103.254
RARP protocol                   :DISABLE
DHCP/BOOTP protocol             :DISABLE
root password                   :""
Authentic community             :"******"
Trap community                  :"public"
Trap address                    :0.0.0.0
SysContact                      :""
SysName                         :""
SysLocation                     :""
DefaultTTL                      :255
EnableAuthenTrap                :2
NetWare protocol                :ENABLE
Packet type                     :EUC
NetWare mode                    :PSERVER
FSERVER name 1                  :"OKIDATA"
FSERVER name 2                  :""
FSERVER name 3                  :""
FSERVER name 4                  :""
FSERVER name 5                  :""
FSERVER name 6                  :""
FSERVER name 7                  :""
FSERVER name 8                  :""
Machine name                    :"FX-176VP"
Password                        :""
Job polling interval            :4
Bindery mode                    :ENABLE
NDS tree                        :""
NDS context                     :""
PSERVER name 1                  :""
PSERVER name 2                  :""
PSERVER name 3                  :""
PSERVER name 4                  :""
PSERVER name 5                  :""
PSERVER name 6                  :""
PSERVER name 7                  :""
PSERVER name 8                  :""
Job timeout                     :10
EtherTalk protocol              :ENABLE
Zone name                       :"*"
NetBEUI protocol                :ENABLE
Computer name                   :"ML1E7750"
Workgroup name                  :"PrintServer"
Comment                         :"EthernetBoard MLETB08"
NetWare port name               :"FX-176-prn1"
EtherTalk port name             :"ML1E7750"
BOJ string                      :""
EOJ string                      :""
BOJ string(euc/sjis)            :""
EOJ string(euc/sjis)            :"\x04"
Printer type                    :PS
TAB size   (char.)              :8
Pass width (char.)              :78
Pass length(line)               :66
lpr/ftp banner                  :NO
Prn-Trap community              :"public"
TCP#1 Trap enable               :DISABLE
On-line trap                    :DISABLE
Off-line trap                   :DISABLE
Paper Out trap                  :DISABLE
Paper Jam trap                  :DISABLE
```

```
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#1 Trap address            :0.0.0.0
TCP#2 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#2 Trap address            :0.0.0.0
TCP#3 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#3 Trap address            :0.0.0.0
TCP#4 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#4 Trap address            :0.0.0.0
TCP#5 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#5 Trap address            :0.0.0.0
IPX   Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
IPX   Trap address            :"000000000000"
IPX   Trap net                :"00000000"
```

1.6.21.3 NIC TEST PRINT (TYPE 2 OEL)

```
EthernetBoard MLETB08 Version 2.0.1

*** Configuration report ***
TCP/IP protocol                 :ENABLE
IP address                      :202.250.103.63
Subnet Mask                     :255.255.255.0
Gateway address                 :202.250.103.254
RARP protocol                   :DISABLE
DHCP/BOOTP protocol             :DISABLE
DNS server(Pri.)                :202.250.103.255
DNS server(Sec.)                :0.0.0.0
root password                   :""
Authentic community             :"******"
Trap community                  :"public"
Trap address                    :202.250.103.63
SysContact                      :""
SysName                         :"FX-176VP"
SysLocation                     :""
DefaultTTL                      :255
EnableAuthenTrap                :1
NetWare protocol                :DISABLE
Packet type                     :AUTO
NetWare mode                    :PSERVER
FSERVER name 1                  :"OKIDATA"
FSERVER name 2                  :""
FSERVER name 3                  :""
FSERVER name 4                  :""
FSERVER name 5                  :""
FSERVER name 6                  :""
FSERVER name 7                  :""
FSERVER name 8                  :""
Machine name                    :"ifax176VPsrv"
Password                        :""
Job polling interval            :4
Bindery mode                    :ENABLE
NDS tree                        :""
NDS context                     :""
PSERVER name 1                  :""
PSERVER name 2                  :""
PSERVER name 3                  :""
PSERVER name 4                  :""
PSERVER name 5                  :""
PSERVER name 6                  :""
PSERVER name 7                  :""
PSERVER name 8                  :""
Job timeout                     :10
EtherTalk protocol              :DISABLE
Zone name                       :"*"
NetBEUI protocol                :ENABLE
Computer name                   :"ML0012F9"
Workgroup name                  :"PrintServer"
Comment                         :"EthernetBoard MLETB08"
NetWare port name               :"FX-176VP"
EtherTalk port name             :"ML0012F9"
BOJ string                      :""
EOJ string                      :""
BOJ string(euc/sjis)            :""
EOJ string(euc/sjis)            :"\x04"
Printer type                    :PS
TAB size   (char.)              :8
Pass width (char.)              :78
Pass length(line)               :66
lpr/ftp banner                  :NO
Prn-Trap community              :"public"
TCP#1 Trap enable               :DISABLE
On-line trap                    :ENABLE
Off-line trap                   :ENABLE
Paper Out trap                  :ENABLE
Paper Jam trap                  :ENABLE
```

```
Cover Open trap               :ENABLE
Printer Error trap            :ENABLE
TCP#1 Trap address            :202.250.103.63
TCP#2 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#2 Trap address            :0.0.0.0
TCP#3 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#3 Trap address            :0.0.0.0
TCP#4 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#4 Trap address            :0.0.0.0
TCP#5 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#5 Trap address            :0.0.0.0
IPX   Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
IPX   Trap address            :"000000000000"
IPX   Trap net                :"00000000"
SMTP server                   :"mail.taka.okidata.co.jp"
POP3 server                   :"mail.taka.okidata.co.jp"
POP3 server UserID            :"ifax176VP"
POP3 server Password          :"********"
Host name                     :"p21aa37t"
E-mail address                :"ifax176VP@okidata.co.jp"
SMTP port number              :25
POP3 port number              :110
Use APOP                      :NO
SMTP Transmit                 :ENABLE
SMTP Receive                  :ENABLE
POP3                          :ENABLE
DSN                           :DISABLE
PASSWORD SETTING              :""
```

1.6.21.4 NIC TEST PRINT (TYPE 2 ODA)

```
EthernetBoard MLETB08 Version 2.0.1A

*** Configuration report ***
TCP/IP protocol                 :ENABLE
IP address                      :202.250.103.63
Subnet Mask                     :255.255.255.0
Gateway address                 :202.250.103.254
RARP protocol                   :DISABLE
DHCP/BOOTP protocol             :DISABLE
DNS server(Pri.)                :202.250.103.255
DNS server(Sec.)                :0.0.0.0
root password                   :""
Authentic community             :"******"
Trap community                  :"public"
Trap address                    :202.250.103.63
SysContact                      :""
SysName                         :"FX-176VP"
SysLocation                     :""
DefaultTTL                      :255
EnableAuthenTrap                :1
NetWare protocol                :DISABLE
Packet type                     :AUTO
NetWare mode                    :PSERVER
FSERVER name 1                  :"OKIDATA"
FSERVER name 2                  :""
FSERVER name 3                  :""
FSERVER name 4                  :""
FSERVER name 5                  :""
FSERVER name 6                  :""
FSERVER name 7                  :""
FSERVER name 8                  :""
Machine name                    :"ifax176VPsrv"
Password                        :""
Job polling interval            :4
Bindery mode                    :ENABLE
NDS tree                        :""
NDS context                     :""
PSERVER name 1                  :""
PSERVER name 2                  :""
PSERVER name 3                  :""
PSERVER name 4                  :""
PSERVER name 5                  :""
PSERVER name 6                  :""
PSERVER name 7                  :""
PSERVER name 8                  :""
Job timeout                     :10
EtherTalk protocol              :DISABLE
Zone name                       :"*"
NetBEUI protocol                :ENABLE
Computer name                   :"ML0012F9"
Workgroup name                  :"PrintServer"
Comment                         :"EthernetBoard MLETB08"
NetWare port name               :"FX-176VP"
EtherTalk port name             :"ML0012F9"
BOJ string                      :""
EOJ string                      :""
BOJ string(euc/sjis)            :""
EOJ string(euc/sjis)            :"\x04"
Printer type                    :PS
TAB size   (char.)              :8
Pass width (char.)              :78
Pass length(line)               :66
lpr/ftp banner                  :NO
Prn-Trap community              :"public"
TCP#1 Trap enable               :DISABLE
On-line trap                    :ENABLE
Off-line trap                   :ENABLE
Paper Out trap                  :ENABLE
Paper Jam trap                  :ENABLE
```

```
Cover Open trap               :ENABLE
Printer Error trap            :ENABLE
TCP#1 Trap address            :202.250.103.63
TCP#2 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#2 Trap address            :0.0.0.0
TCP#3 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#3 Trap address            :0.0.0.0
TCP#4 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#4 Trap address            :0.0.0.0
TCP#5 Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
TCP#5 Trap address            :0.0.0.0
IPX   Trap enable             :DISABLE
On-line trap                  :DISABLE
Off-line trap                 :DISABLE
Paper Out trap                :DISABLE
Paper Jam trap                :DISABLE
Cover Open trap               :DISABLE
Printer Error trap            :DISABLE
IPX   Trap address            :"000000000000"
IPX   Trap net                :"00000000"
SMTP server                   :"mail.taka.okidata.co.jp"
POP3 server                   :"mail.taka.okidata.co.jp"
POP3 server UserID            :"ifax176VP"
POP3 server Password          :"********"
Host name                     :"p21aa37t"
E-mail address                :"ifax176VP@okidata.co.jp"
SMTP port number              :25
POP3 port number              :110
Use APOP                      :NO
SMTP Transmit                 :ENABLE
SMTP Receive                  :ENABLE
POP3                          :ENABLE
DSN                           :DISABLE
PASSWORD SETTING              :""
```

1.6.22 E-mail Maintenance Report

E-mail Maintenance Function

When EMAIL MAINTENANCE=ON (Setting by service personnal), e-mail is transmitted at 00:00 a.m. every day the following image format.\
Also when an Email which has the remotemaint / report in the subject is received, the data as following format will be sent to the sender.

```
07/01/2001   12:00
PERSONAL ID        =0dc Takasaki
TEL NO.            =609-222-1234
TEL NO.(G3 OPTION) =609-333-4567                                    *2
MAIN BOARD
             CPU-ROM    VERSION         aaaa
                        HASH            OK       hhhh
             CPU-RAM                    OK
             PROGRAM1   VERSION         aaaa
                        HASH            OK       hhhh
             PROGRAM2   VERSION         aaaa
                        HASH            OK       hhhh
             LANGUAGE   VERSION         aaaa
                        HASH            OK       hhhh
             DEFAULT    VERSION         aaaa
                        HASH            OK       hhhh
             DEFAULT    TYPE            01
             MODEM      VERSION         hhhh
             RAM1       8M              OK                          *1
             RAM2                       OK
             CARTRIDGE (TONER/ID)       bbbb/bbbb
             OPT-MEM    8M              OK                       *2
DEVICE ID    FX-176VP
HSP          TYPE2                     OK                       *2
G3 OPTION BOARD                        OK                       *2
             CPU-ROM    VERSION         aaaa
                        HASH            OK       hhhh
             CPU-RAM                    OK
             PROGRAM    VERSION         aaaa
                        HASH            OK       hhhh
             RAM        2M              OK
             DPRAM      2K              OK
             MODEM      VERSION         hhhh
MACHINE CONDITION
             COVER                      CLOSE                    *3
             DRUM CART.                 EXIST                    *4
             TONER                      NORMAL                   *5
             PRINTER ALARM              OK                       *6
MACHINE COUNTER
             DRUM                       12345
             TONER                      12345
             SCAN                       12345
             PRINT                      12345
             DRUM(T)                    12345
```

<Note: No actual combination of G3 opt. and NIC opt. exists in the above figure.>

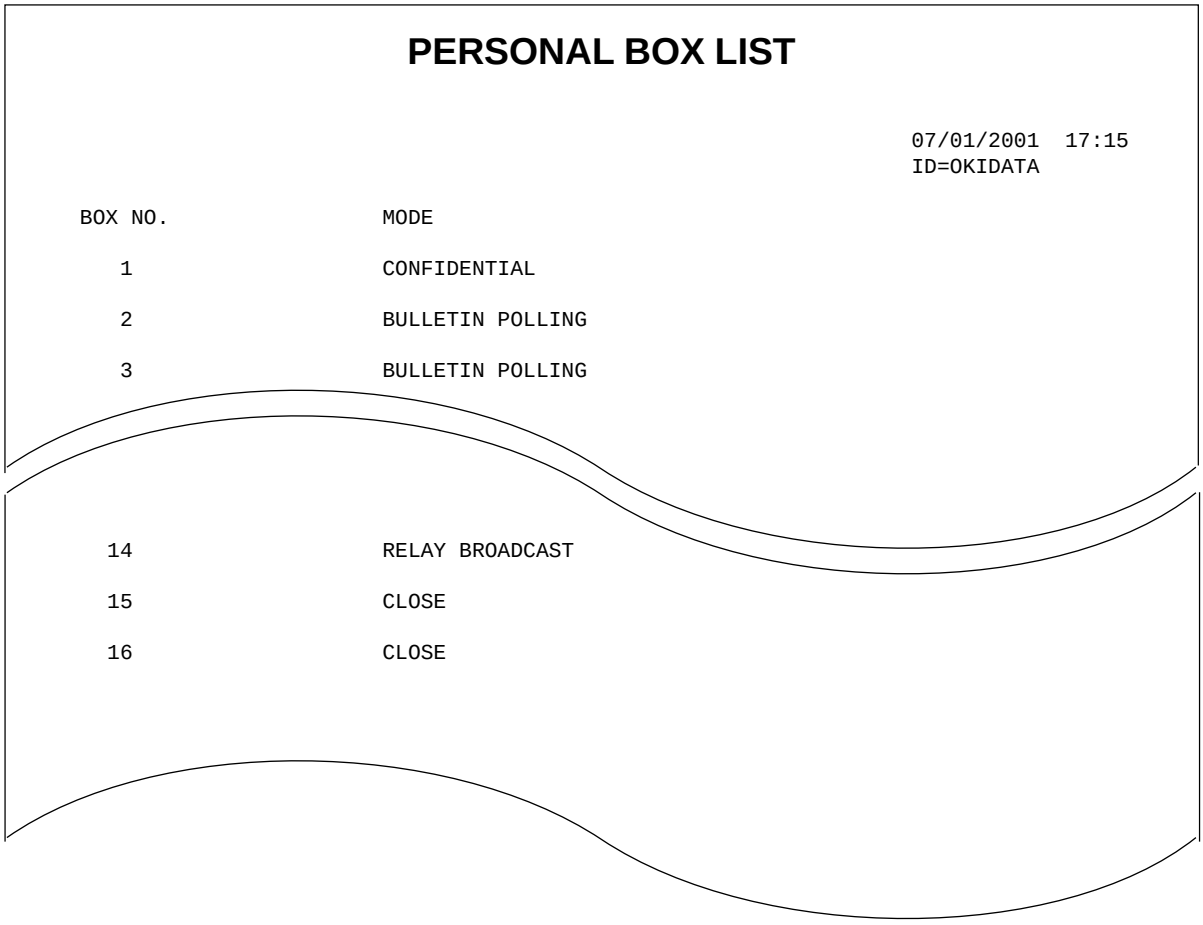
**1: Satisfies the described condition of self diagnosis report.*
**2: Note that for equipment option items, the line followed are crowded for editing when no optional equipment is installed.*
Eg) When G3 option or G4 option is not installed, the next line of "HSP" is "MACHINE CONDITION".
**3: COVER: "OPEN" or "CLOSE"*
**4: DRUM CART.: No ID alarm is detected. "NONE" or "EXIST"*
**5: TONER: Toner near end is detected. "NORMAL" or "LOW"*
**6: PRINTER ALARM: To be described the classfication when printer alarm is detected. "NONE" or "PA2" or "PA3" or "PA4"*

- Stored in the LAN buffer as ASCII format.
- One line does not descrived exceeding 80 digits. No limitation in number of line.
- Attaches "CR-LF" to the end of line at the time of new line.

Note) The transmission of Email Maintenance Report will not be recorded on the Activity Report. When the Emails that have the remotemaint / report in the subjects are received, if the setting is Email Maintenance = OFF, then it will be recorded as communication error (S.C. = FF02)

1.6.23 Personal Box List

- Indicates the setting contents of each Personal Box as CONFIDENTIAL, RELAY BROADCAST, BULLETIN POLLING or CLOSE.
- Prints the Broadcast Confirmation Report of the Boxes set for relay broadcasting for each operation. This report image is identical to that of the Relay Broadcast Entry Report (1.6.24) printed in the Personal Box setting operation.



PERSONAL BOX LIST

07/01/2001 17:15
ID=OKIDATA

BOX NO.	MODE
1	CONFIDENTIAL
2	BULLETIN POLLING
3	BULLETIN POLLING
14	RELAY BROADCAST
15	CLOSE
16	CLOSE

1.6.24 Relay Broadcast Entry Report

Method:
The report will be manually or automatically printed out.

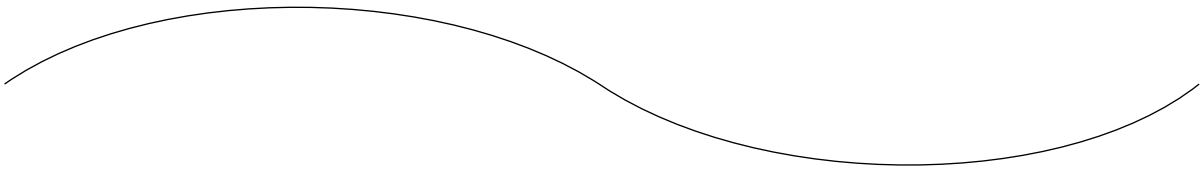
Descriptions:
1. Title of the report
2. Date and time when the report was printed
3. Sender ID
4. Personal Box No.
5. Required transmission address (Speed dial)
6. Registered location ID

RELAY BROADCAST ENTRY REPORT

07/01/2001 17:15
ID=OKIDATA

PERSONAL BOX=16

LOCATION ID	LOCATION ID
1=12345678901234567890123456789012345678901234567890	2=12345678901234567890123456789012345678901234567890
3=FX-056VP	4=FX-176VP
5=OKI-SHIBAURA1	6=OKI-SHIBAURA2
7=FX-056enhnce	8=FX-176enhance
9=FAXMFP-01	10=FAXMFP-02
11=IPFAX	12=takasaki@okidata.co.jp
13=03 1234 5678	14=FX-056
15=FX-176	16=FX-050
17=FX-175	18=FX-060
19=FX-046MFP	20=FX-046
21=OKIFAX5600	22=OKIFAX1050
23=OKIFAX1000	24=OKIFAX2200
25=shibaura@okidata.co.jp	26=OF-1
27=OF-2B	28=OF-21
29=OF-12M	30=OF-55M
31=OKIDATA-0000	32=OKIDATA-0001
33=OKIDATA-0002	34=OKIDATA-0003
35=OKIDATA-0004	36=OKIDATA-0005
37=OKIDATA-0006	38=OKIDATA-0007
39=OKIDATA-0008	30=OKIDATA-0009



101=OKIDATA-0000	102=OKIDATA-0001
103=OKIDATA-0002	104=OKIDATA-0003
105=OKIDATA-0004	106=OKIDATA-0005
107=OKIDATA-0006	108=OKIDATA-0007
109=OKIDATA-0008	110=OKIDATA-0009
111=OKIDATA-000A	112=OKIDATA-000B
113=OKIDATA-000C	114=OKIDATA-000D
115=OKIDATA-000E	116=OKIDATA-000F
117=OKIDATA-0010	118=OKIDATA-0011
119=OKIDATA-0012	120=OKIDATA-0013
121=OKIDATA-0014	122=OKIDATA-0015
123=OKIDATA-0016	124=OKIDATA-0017
125=OKIDATA-0018	126=OKIDATA-0019
127=OKIDATA-001A	128=OKIDATA-001B
129=OKIDATA-001C	130=OKIDATA-001D
131=OKIDATA-001E	132=OKIDATA-001E
133=OKIDATA-0020	134=OKIDATA-0021
135=OKIDATA-0022	136=OKIDATA-0023
137=OKIDATA-0024	138=OKIDATA-0025
139=OKIDATA-0026	140=OKIDATA-0027

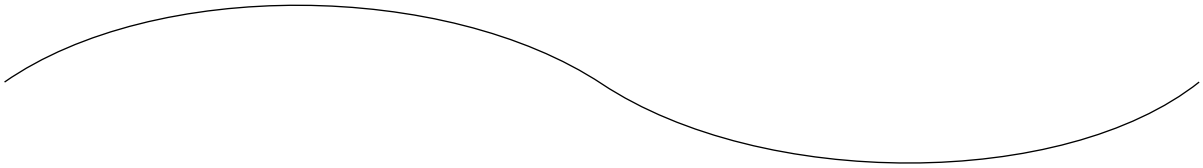
Relay Broadcast Entry Report for FX-176VP (1/2)

RELAY BROADCAST ENTRY REPORT P1

07/01/2001 17:15
ID=OKIDATA

PERSONAL BOX=16

LOCATION ID	LOCATION ID
141=OKIDATA-0028	142=OKIDATA-0029
143=OKIDATA-002A	144=OKIDATA-002B
145=OKIDATA-002C	146=OKIDATA-002D
147=OKIDATA-002E	148=OKIDATA-002F
149=OKIDATA-0030	150=OKIDATA-0031
151=OKIDATA-0032	152=OKIDATA-0033
153=OKIDATA-0034	154=OKIDATA-0035
155=OKIDATA-0036	156=OKIDATA-0037
157=OKIDATA-0038	158=OKIDATA-0039
159=OKIDATA-003A	160=OKIDATA-003B
161=OKIDATA-003B	162=OKIDATA-003C
163=OKIDATA-003D	164=OKIDATA-003E
165=OKIDATA-003F	166=OKIDATA-0040
167=OKIDATA-0041	168=OKIDATA-0042
169=OKIDATA-0043	170=OKIDATA-0044
171=OKIDATA-0045	172=OKIDATA-0046
173=OKIDATA-0047	174=OKIDATA-0048
175=OKIDATA-0049	176=OKIDATA-004A
177=OKIDATA-004B	178=OKIDATA-004C
179=OKIDATA-004E	180=OKIDATA-004F



211=OKIDATA-006C	212=OKIDATA-006D
213=OKIDATA-006E	214=OKIDATA-006F
215=OKIDATA-0070	216=OKIDATA-0071
217=OKIDATA-0072	218=OKIDATA-0073
219=OKIDATA-0074	220=OKIDATA-0075
221=OKIDATA-0076	222=OKIDATA-0077
223=OKIDATA-0078	224=OKIDATA-0079
225=OKIDATA-007A	226=OKIDATA-007B
227=OKIDATA-007C	228=OKIDATA-007D
229=OKIDATA-007E	230=OKIDATA-007F

Relay Broadcast Entry Report for FX-176VP (2/2)

1.6.25 Descriptions of Communication Mode Column

1.6.25.1 Mode Column in Activity Report

Communication	G3	G4	T.38	T.37	F2N (Email)	F2N (G3)
TX	TX	TX-G4	TX-IP	I.FAX-TX	FNET	
POLL-TX	POLL TX	POLL TX-G4	POLL TX-IP	–		
Bull. POLL TX						
Bull. POLL TX(BOX)	POLL=XX	POLL=XX-G4	POLL=XX-IP			
Broadcast	TX	TX-G4	TX-IP	BC-I.FAX	FNET	
Relay Broadcast	REL-T=XX	REL-T=XX-G4	REL-T=XX-IP	REL-I.FAX=XX	REL-FNET=XX	
Relay BC Conf. TX	REP-T=XX	REP-T=XX-G4	REP-T=XX-IP	–		REP-FNET=XX
Relay Broadcast (Gateway)	REL-I.FAX	REL-T=XX-G4	–	–	–	REL-FNET
Relay BC Conf. TX (Gateway)	–	–	–	REP-I.FAX	–	–
FAX Forwarding	FWD-T	FWD-T-G4	FWD-T-IP	FWD-T	FWD-FNET	
Batch TX	BATCH	BATCH-G4	BATCH-IP	BATCH-IFAX	BATCH-FNET	
Fax2Net (WEB Retrieval)	–	–	–	–	WEB	–
Fax2Net (Broadcasting)					–	BC-FNET=XX
Fax2Net (Payment Card Reg.)					–	P-CARD
RX	RX	RX-G4	RX-IP	I.FAX-RX	–	
Polling RX	POLL RX *1	POLL RX-G4	POLLING-IP	–		
Confidential RX	CONF=XX	CONF=XX-G4	CONF=XX-IP	–		
Relay Initiate RX	REL-R=XX	REL-R=XX-G4	REL-R=XX-IP	–		
FAX Forwarding RX	FWD-R	FWD-R-G4	FWD-R-IP	–		
Manual TX	TX	–	–	–		
Manual POLL TX						
Manual RX	RX	–	–	I.FAX-RX	–	

*1 Error MCF is the same to the above.
*2 When the mixed broadcasting is sent with T.37 available, the error reports of T.37 transmission will be :- In case Email locations are more than one, then “BC-1.FAX”,- In case it is only one, then “I.FAX-TX”.

1.6.25.2 Mode Column in MCF-multi Report (with/without pictures)

Communication	G3	G4	T.38	T.37	F2N (Email)	F2N (G3)
Broadcast	B.C.					
Relay Broadcast	REL-BC=XX					
Relay Broadcast (Gateway)	REL-BC-I.FAX	REL-BC-I.FAX	—	—	—	REL-BC-I.FAX

1.6.26 Output Conditions of Various MCF Reports During Transmission

1.6.26.1 Difference from FX-056e/176e

1.6.26.2 Reports to be output when queuing for communication is cancelled

	Item No.	Setting			Automatic Output Report				
		MCF (SINGLE)	MCF (MULTI)	ERR. REP	BROADCAST Each Address	Described together with MCF (MULTI) (with picture)	Image in MCF Setting		
							ON		OFF
							MCF with picture	MCF	MCF
Delayed Broadcast (No call origination for all the addresses)	1	—	ON	ON	×	○ (B.C.STOP)	×	×	×
	2	—	OFF	ON	×	○ (B.C.STOP)	×	×	×
	3	—	ON	OFF	×	○ (B.C.STOP)	×	×	×
Standby of redial for Broadcast (Already call origination for some address)	4	—	ON	ON	○	○ (B.C.STOP)	×	×	×
	5	—	OFF	ON	○	○ (B.C.STOP)	×	×	×
	6	—	ON	OFF	○	○ (B.C.STOP)	×	×	×
During multiple wait of Broadcast (Already call origination for some address)	7	—	ON	ON	○	○ (B.C.STOP)	×	×	×
	8	—	OFF	ON	○	○ (B.C.STOP)	×	×	×
	9	—	ON	OFF	○	○ (B.C.STOP)	×	×	×
Delayed single location memory	10	ON	—	ON	—	—	○	×	○
	11	ON	—	OFF	—	—	○	×	○
	12	OFF	—	ON	—	—	○	×	○
Single location memory: Standby of redial	13	ON	—	ON	—	—	○	×	○
	14	ON	—	OFF	—	—	○	×	○
	15	OFF	—	ON	—	—	○	×	○
Delayed single location (Feeder)	16	ON	—	ON	—	—	×	○	○
	17	ON	—	OFF	—	—	×	○	○
	18	OFF	—	ON	—	—	×	○	○
Single location from Feeder: Standby of redial	19	ON	—	ON	—	—	×	○	○
	20	ON	—	OFF	—	—	×	○	○
	21	OFF	—	ON	—	—	×	○	○
First read TX	22	ON	—	ON	—	—	○	×	○
	23	ON	—	OFF	—	—	○	×	○
	24	OFF	—	ON	—	—	○	×	○

1.6.26.3 Reports to be output upon canceling communication by pressing STOP Key

	Item No.	Setting			Automatic Output Report				
		MCF (SINGLE)	MCF (MULTI)	ERR. REP	BROADCAST Each Address	Described together with MCF (MULTI) (with picture)	Image in MCF Setting		
							ON		OFF
							MCF with picture	MCF	MCF
Broadcast of	25	—	ON	ON	○	○ (B.C.STOP)	×	×	×
	26	—	OFF	ON	○	○ (B.C.STOP)	×	×	×
	27	—	ON	OFF	○	○ (B.C.STOP)	×	×	×
Single location communication (Feeder)	28	ON	—	ON	—	—	×	○	○
	29	ON	—	OFF	—	—	×	○	○
	30	OFF	—	ON	—	—	×	○	○
Single location communication (Memory)	31	ON	—	ON	—	—	○	×	○
	32	ON	—	OFF	—	—	○	×	○
	33	OFF	—	ON	—	—	○	×	○
First read TX	34	ON	—	ON	—	—	○	×	○
	35	ON	—	OFF	—	—	○	×	○
	36	OFF	—	ON	—	—	○	×	○

1.6.26.4 Reports to be output upon the communication error end

	Item No.	Setting			Automatic Output Report				
		MCF (SINGLE)	MCF (MULTI)	ERR. REP	BROADCAST Each Address	Described together with MCF (MULTI) (with picture)	Image in MCF Setting		
							ON		OFF
							MCF with picture	MCF	MCF
Broadcast communication (During address transmission)	37	—	ON	ON	×	×	×	○	○
	38	—	OFF	ON	×	×	×	○	○
	39	—	ON	OFF	×	×	×	×	×
Broadcast communication (Last address)	40	—	ON	ON	○	○ (B.C.STOP)	×	○	○
	41	—	OFF	ON	×	×	×	○	○
	42	—	ON	OFF	○	○ (B.C.STOP)	×	×	×
Single location communication (Feeder)	43	ON	—	ON	—	—	×	○	○
	44	ON	—	OFF	—	—	×	○	○
	45	OFF	—	ON	—	—	×	○	○
Single location communication (Memory)	46	ON	—	ON	—	—	○	×	○
	47	ON	—	OFF	—	—	○	×	○
	48	OFF	—	ON	—	—	○	×	○
First read TX	49	ON	—	ON	—	—	○	×	○
	50	ON	—	OFF	—	—	○	×	○
	51	OFF	—	ON	—	—	○	×	○

1.6.26.5 Reports to be output when the communication is completed normally.

	Item No.	Setting			Automatic Output Report				
		MCF (SINGLE)	MCF (MULTI)	ERR. REP	BROADCAST Each Address	Described together with MCF (MULTI) (with picture)	Image in MCF Setting		
							ON		OFF
							MCF with picture	MCF	MCF
Broadcast communication (During address transmission)	52	—	ON	ON	×	×	×	×	×
	53	—	OFF	ON	×	×	×	×	×
	54	—	ON	OFF	×	×	×	×	×
Broadcast communication (Last address)	55	—	ON	ON	○	○ (B.C.STOP)	×	×	×
	56	—	OFF	ON	×	×	×	×	×
	57	—	ON	OFF	○	○ (B.C.STOP)	×	×	×
Single location communication (Feeder)	58	ON	—	ON	—	—	×	○	○
	59	ON	—	OFF	—	—	×	○	○
	60	OFF	—	ON	—	—	×	×	×
Single location communication (Memory)	61	ON	—	ON	—	—	○	×	○
	62	ON	—	OFF	—	—	○	×	○
	63	OFF	—	ON	—	—	×	×	×
First read TX	64	ON	—	ON	—	—	○	×	○
	65	ON	—	OFF	—	—	○	×	○
	66	OFF	—	ON	—	—	×	×	×

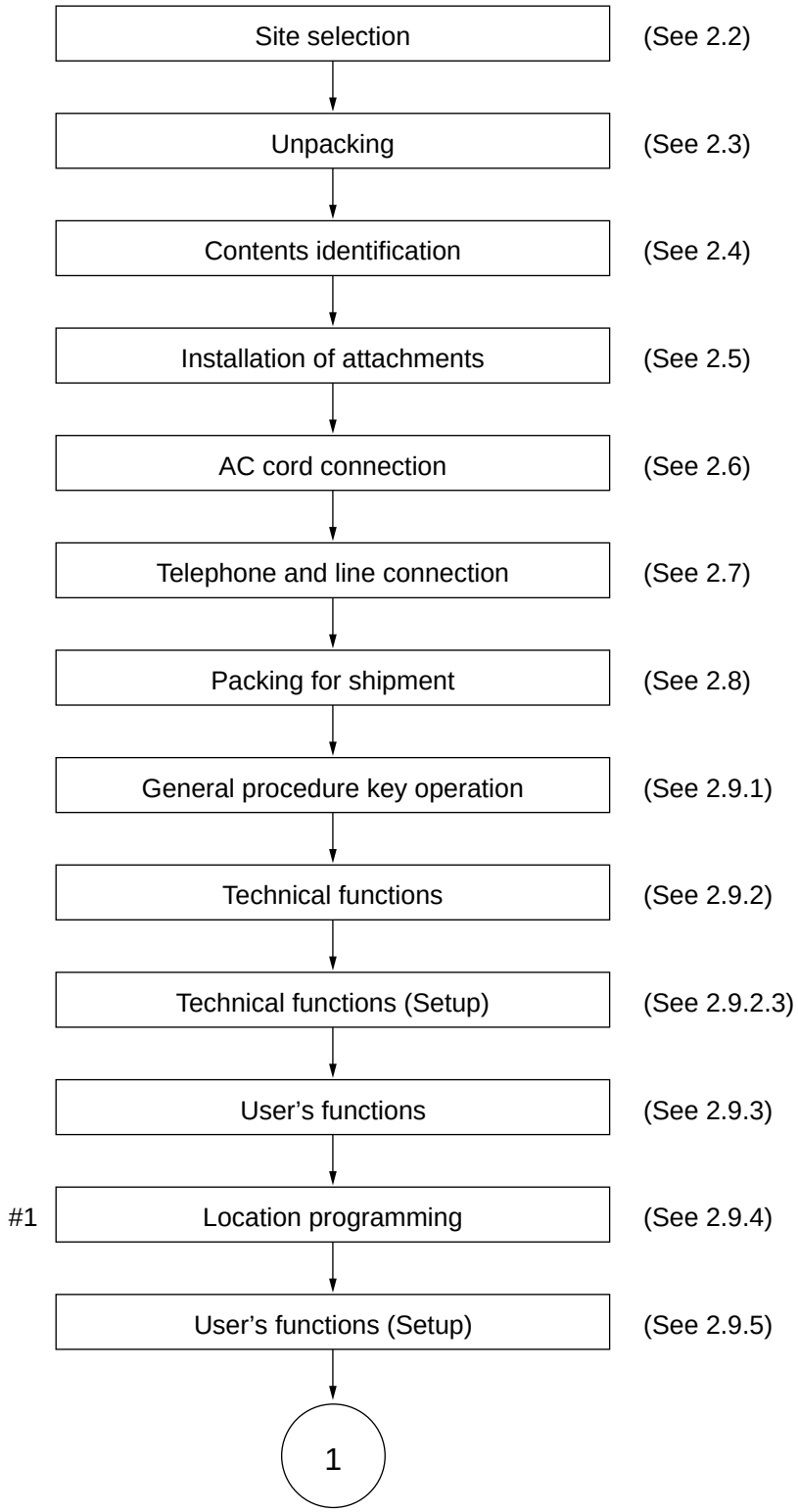
*1: By Image in MCF setting, even though this setting is set to ON, MCF (MULTI) for relay broadcast is without pivture.

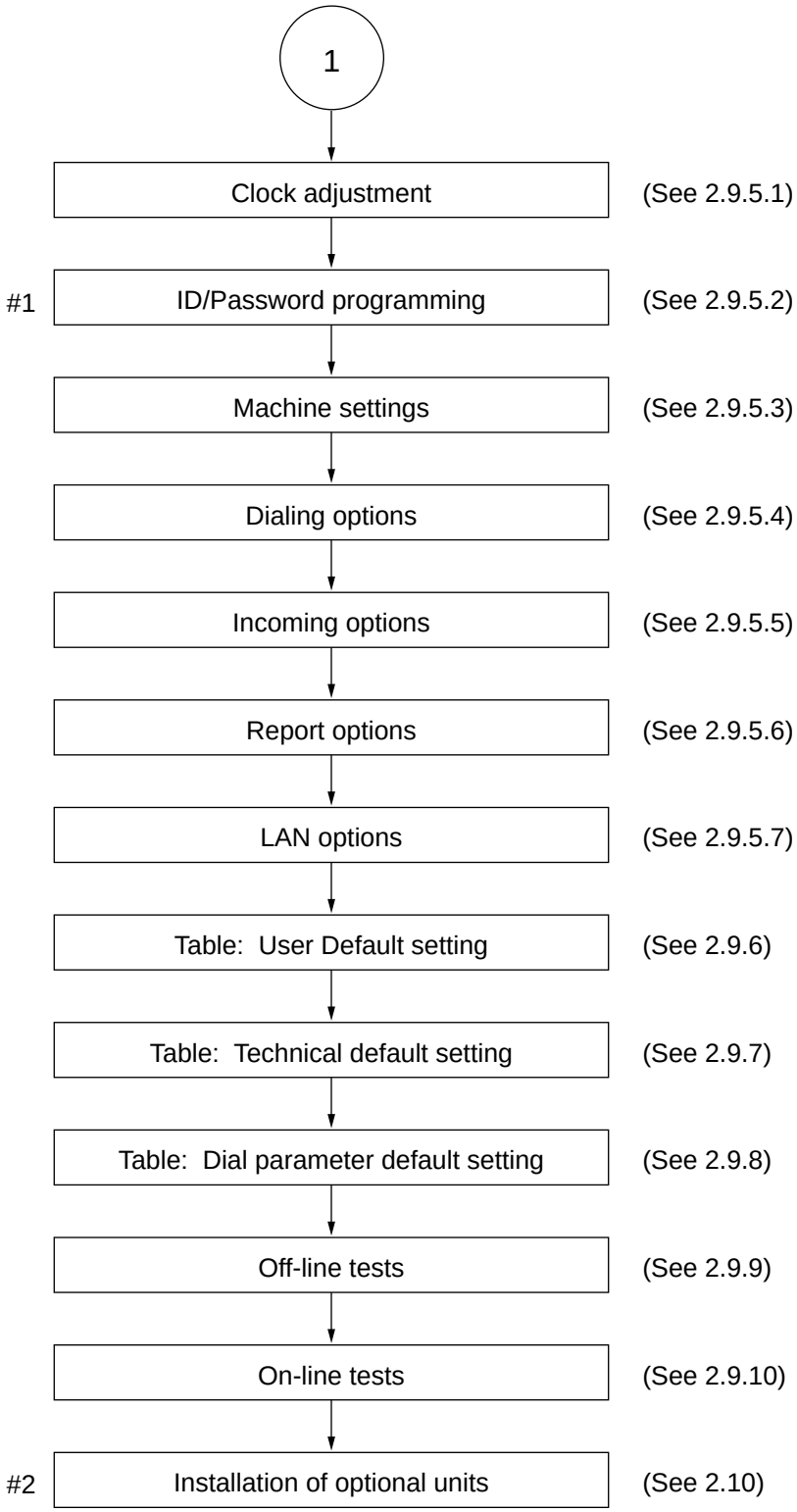
2. INSTALLATION PROCEDURE

A. Setup Information

2.1 General

The following flowchart outlines the installation procedure.





#1: For operation and registration, see FX-056VP/176VP Handbook.
#2: Memory board, G4 option board, LAN option board, Second cassette unit etc.,.

2.2 Site Selection

INSTALLATION
Precautions for Installation

(1) Fluctuation in line voltage
- 120VAC (102V to 127V)
- 230VAC (198V to 264V)

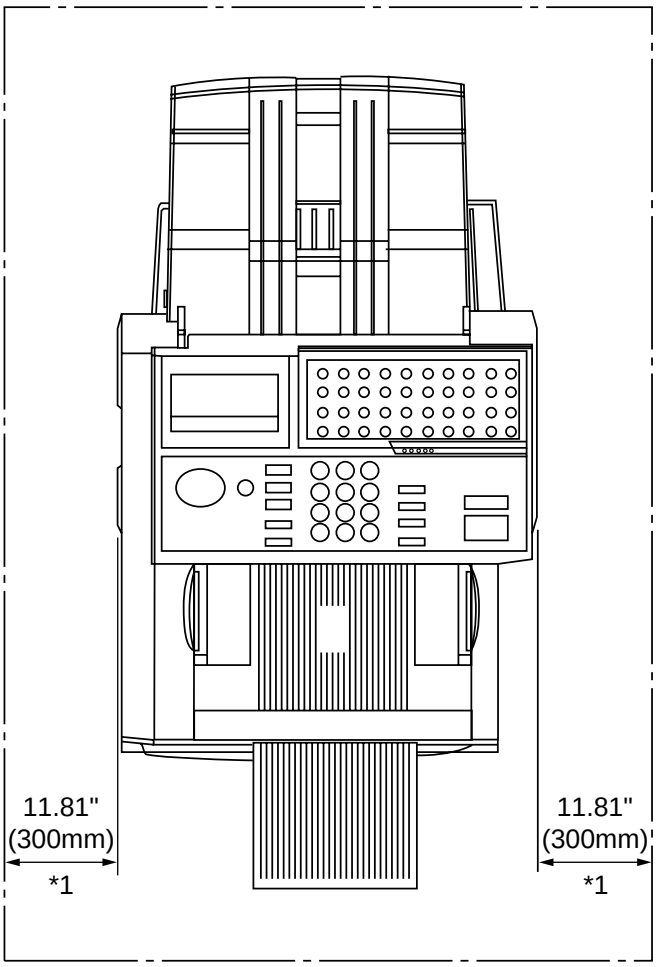
(2) Room temperature
- 50 to 90°F (10 to 32°C)

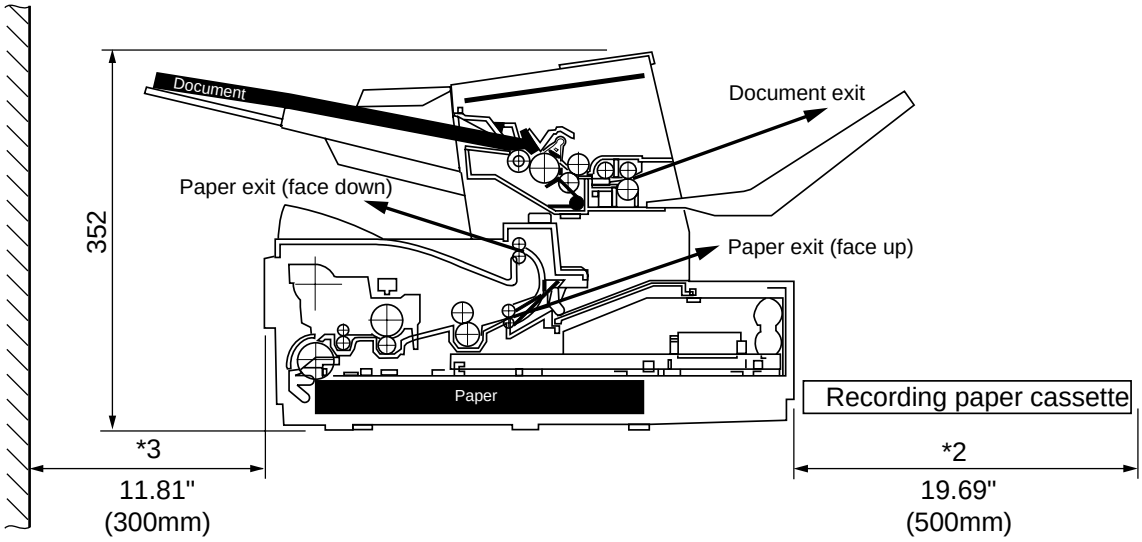
(3) Humidity
- 20 to 80% RH

(4) Operating environment
- Pressure: Equivalent to altitude of 2500m (8020 feet) and below.

(5) Exposure
- Within five minutes at luminous intensity 2000 lux.

(6) Required space for installation
- The facsimile requires the space as shown below for safety and good oprebility.





*Note: *1: This space necessary for having the telephone set.*
**2: This space is necessary for removing the recording paper cassette.*
**3: This space is necessary for installing the document stacker and allow space for the fan exhaust.*

(7) Levelness of installation surface
- 1 degree maximum

(8) Other requirements
Avoid installing in any of the following places:
- A place exposed to direct sunlight
- A place near a heat souce or exposed to vibration
- A dusty place
- A place in the atmosphere of acid gas, or steam etc.,
- A place exposed to quick temperature changes

2.3 Unpacking

Procedure

(1) Remove the on the top of the carton box and open its cover.

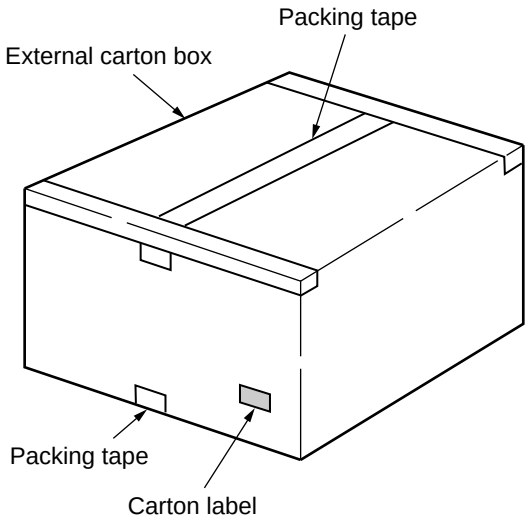


Figure 2.3.1 Unpacking Procedure (1)

(2) Take out the accessory box from the carton box. (See figure 2.3.2)

(3) Take out the machine with plastic wrapper from the box.

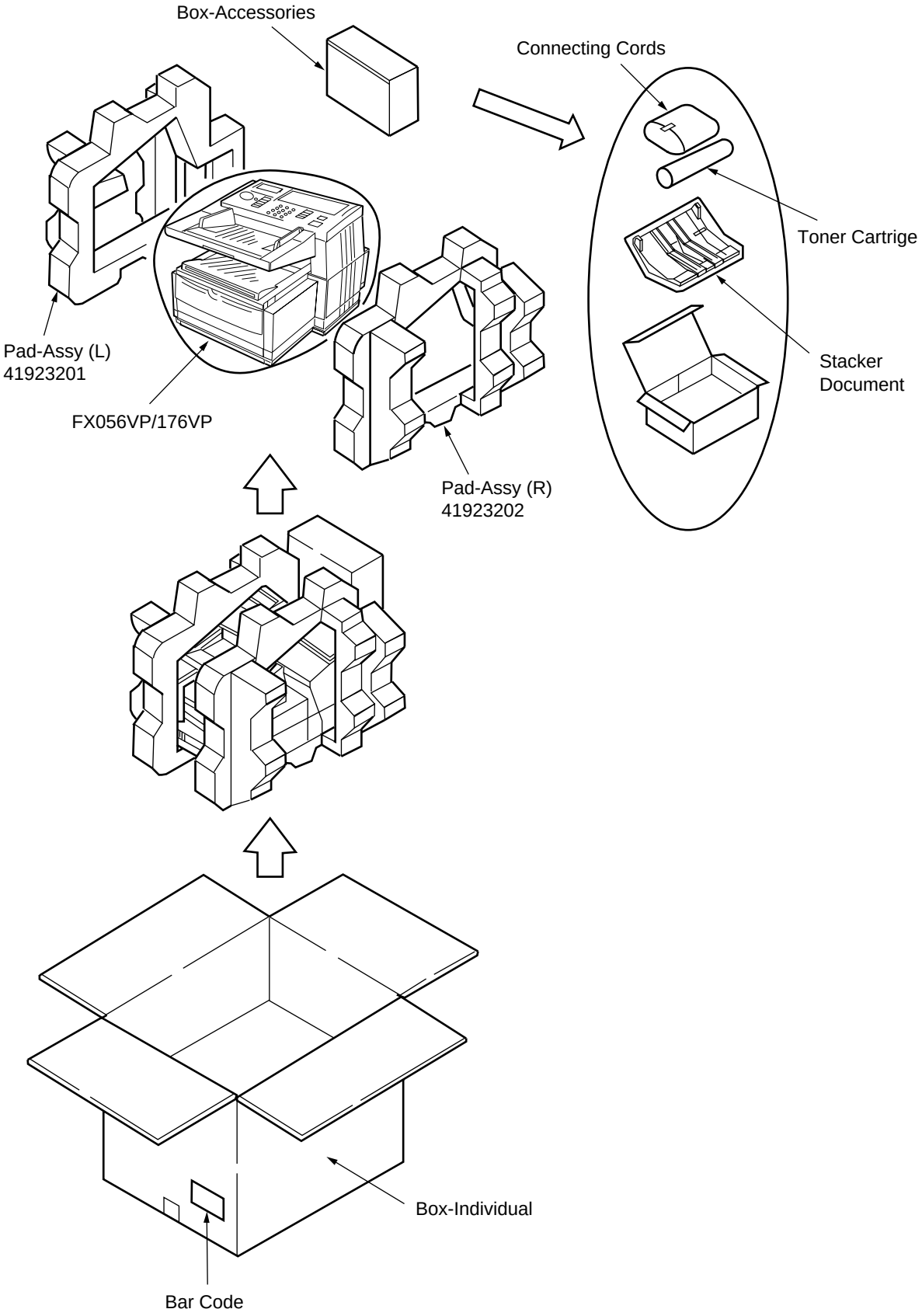


Figure 2.3.2 Unpacking Procedure (2)

2.4 Contents Identification

After having taken out the machine and accompainied accessaries from the carton box, check the contents according to the following list.

Table 2.4.1 Contents List

Item No.	Name	Q'ty	Remarks
1	FX-056VP/176VP facsimile	1	
2	AC power cord	1	
3	I/D unit	1	Already installed.
4	Toner cartridge	1	
5	Document stacker	1	
6	Telephone line code	1	
7	One touch sheet	1	Already installed.
8	User's guide	1 vol.	

2.5 Installation of Attachments

(1) Items
- Image Drum (ID) Unit (already installed)
- Toner cartridge
- Recording paper
- Document stacker

(2) Procedure
1) Toner cartridge
- Peel off the fixed tape attached to the tray-paper.
- Open the tray-document and tray-paper.

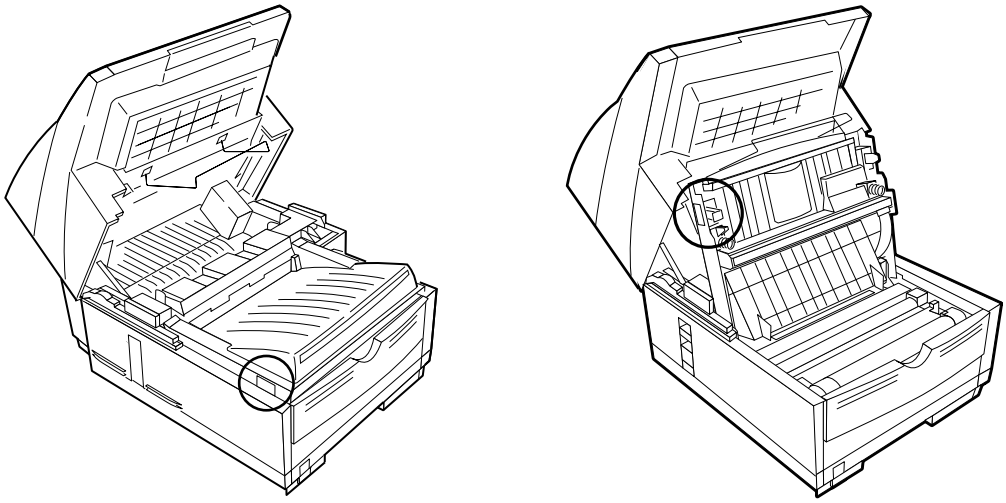


Figure 2.5.1 Toner Cartridge Installation (1)

- Take the plastic cover out of the ID unit.

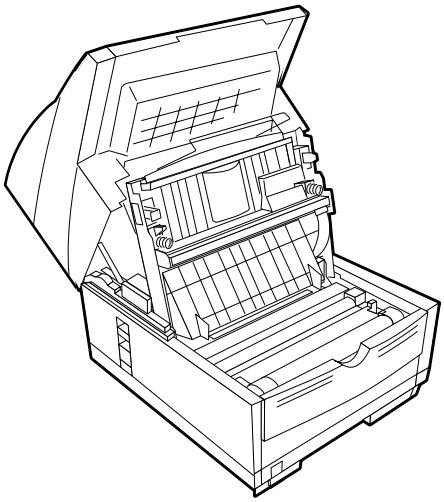


Figure 2.5.2 Toner Cartridge Installation (2)

- Take out the toner cartridge from the damp proof bag, shake it five or six times as shown in the illustration to eliminate the toner deflection, and peel off the seal gently.

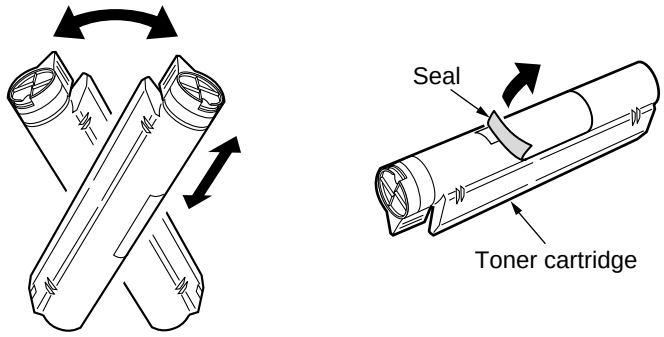


Figure 2.5.3 Toner Cartridge Installation (3)

- Ensure that the plastic tab on the light-hand side of the toner cartridge recess line up with the groove on the toner cartridge.
- Press down on both ends to make sure the cartridge is fully seated.

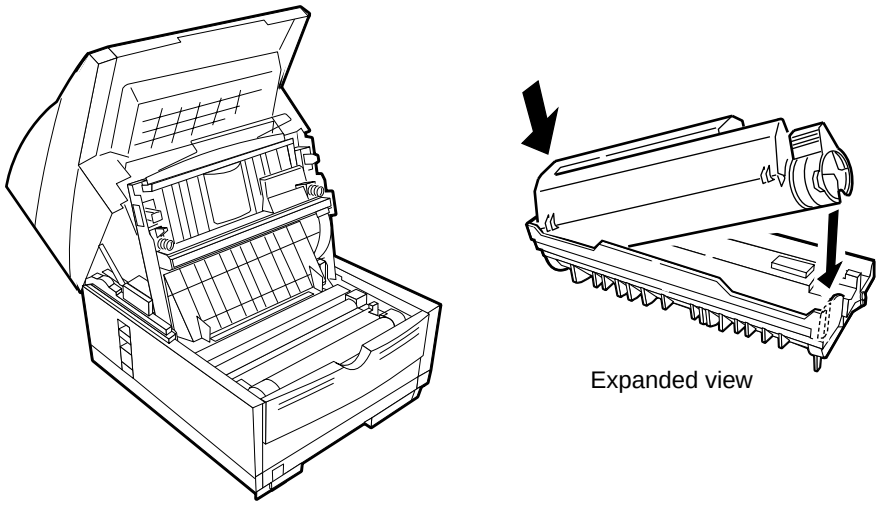


Figure 2.5.4 Toner Cartridge Installation (4)

- Press the gray lever forward until it stops.

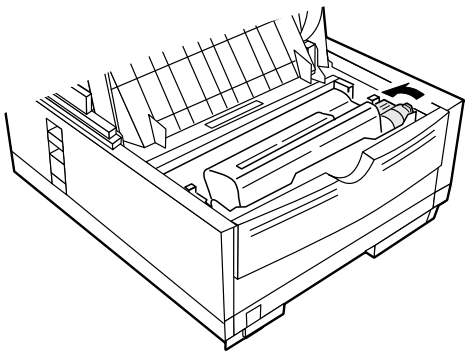


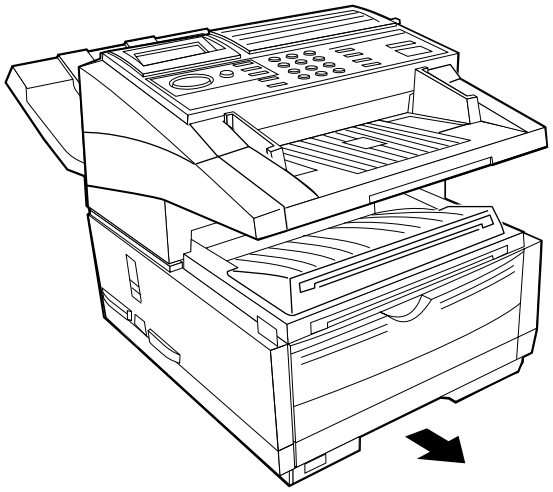
Figure 2.5.5 Toner Cartridge Installation (5)

- Clean the toner scattered in the vicinity of the toner cartridge using a cloth moistened with cold water. Do not use hot water since it makes the toner stick there.
- Close the tray-paper until the buttons have been locked completely.

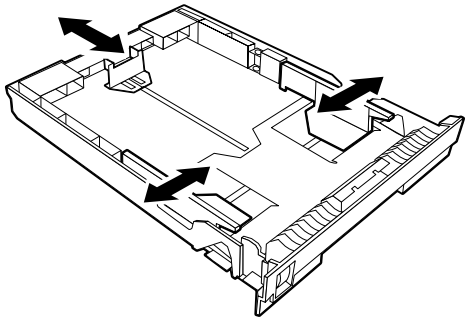
2) Recording paper

Note: About 250 sheets of the new paper can be set in the recording paper cassette.

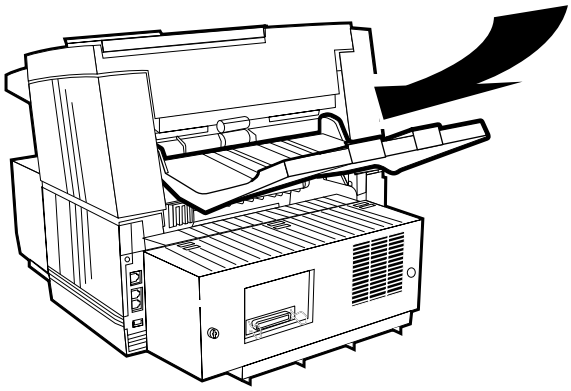
- Remove the paper cassette from the facsimile by pulling the cassette tab.



- Sheets must not exceed the paper full marker of the new paper limit indication. If excessive sheets are set, it will cause paper jams.
- After loading the new paper, push it forward into the slot at the front of the facsimile unit it locks.



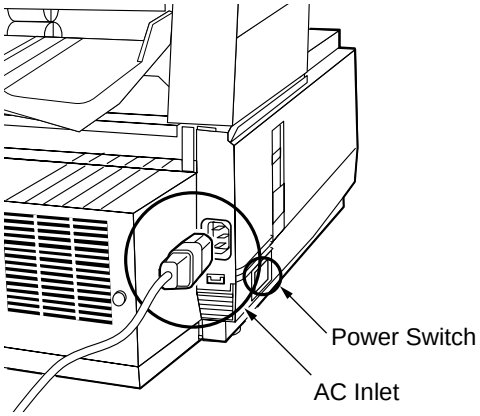
3) Document stacker
- Hang the document stacker onto hanging position.



2.6 AC Cord Connection

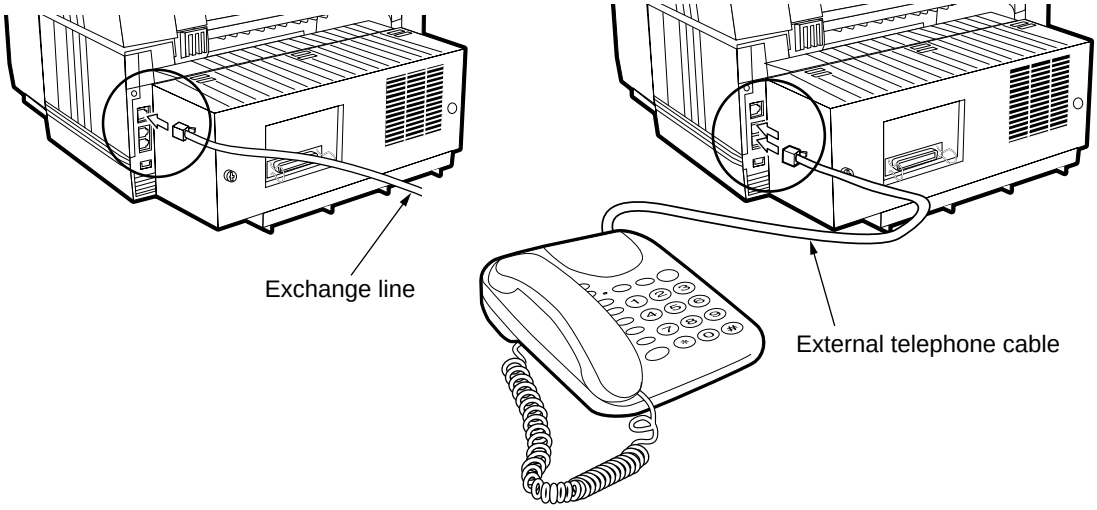
The power supply is provided as follows:
Normal input voltage 120VAC (Voltage range 102 to 127VAC)
Normal input voltage 230VAC (Voltage range 198 to 250VAC)

Check whether the AC voltage of your input is within the above-mentioned voltage range and if so, check that the power switch is turned OFF. After turning off the power switch, connect the female plug on the AC cord to the machine and insert the male plug of the AC cord to the inlet receptacle.
Turn the power switch ON and check that the display shows “(TIME and MEMORY FREE 100%)” message indicating the standby state.



2.7 Telephone and Line Connection

(1) Procedure
• Connect the lines.



2.8 Packing for Shipment

Caution: When packing the FX-056VP/176VP for shipment, REMOVE THE IMAGE DRUM AND TONER FROM THE UNIT AND SHIP SEPARATELY!
Failure to do this will result in damege to the machine.

B. Programming and Initial Settings

2.9 Initial Settings

2.9.1 General Procedure of Key Operation

Note: The fonts displayed on the LCD operation panel may differ from the fonts written this manual.

Accessing to desired functions:

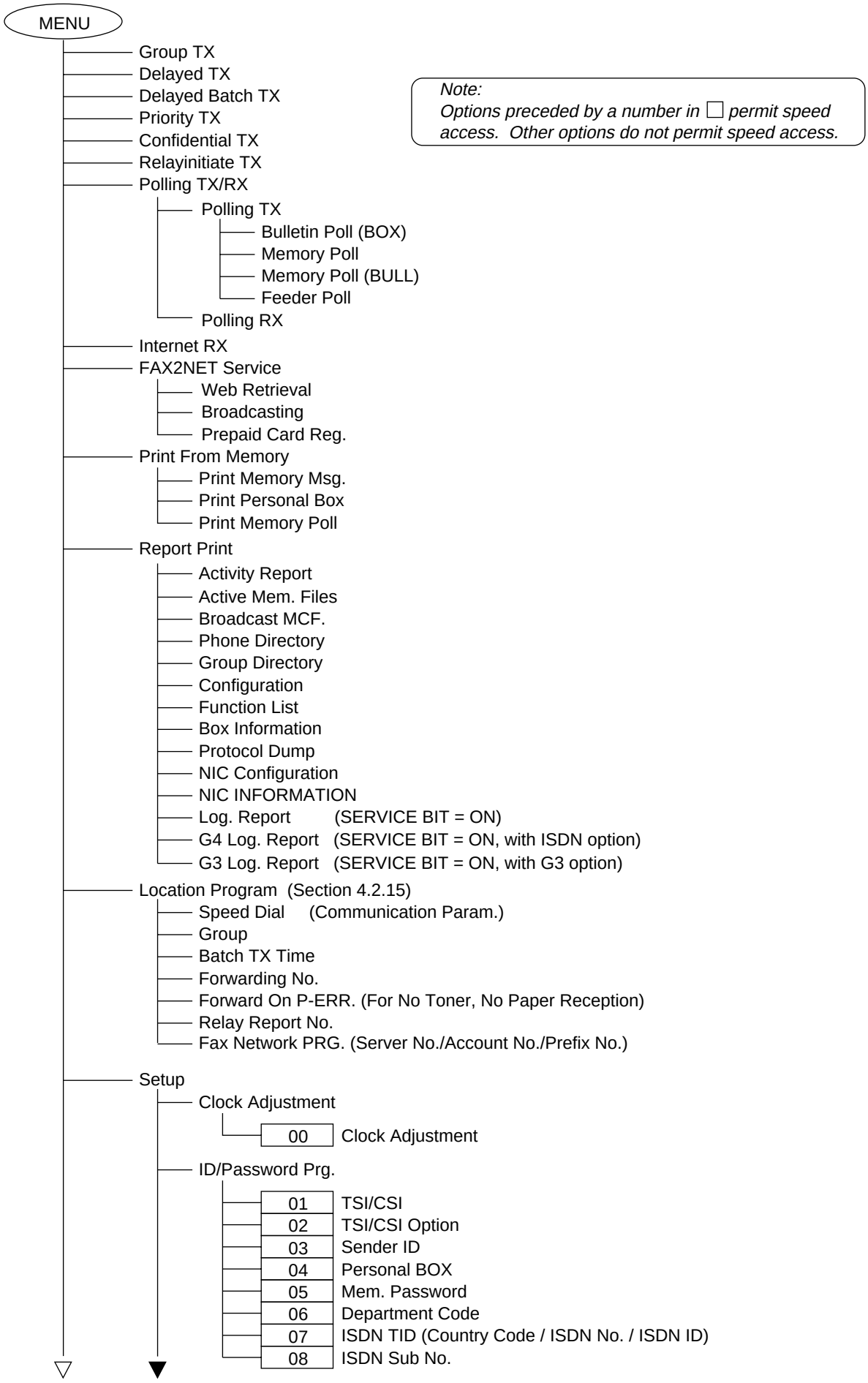
• There are two methods for accessing a desired function: Step access and Speed access (direct access).

• Step Access
To access functions in a stepwise manner, the procedure is like that described for navigating the operational layers. Begin from pressing MENU/EXIT key, and then use the programming keys to locate, enter and set the desired function.

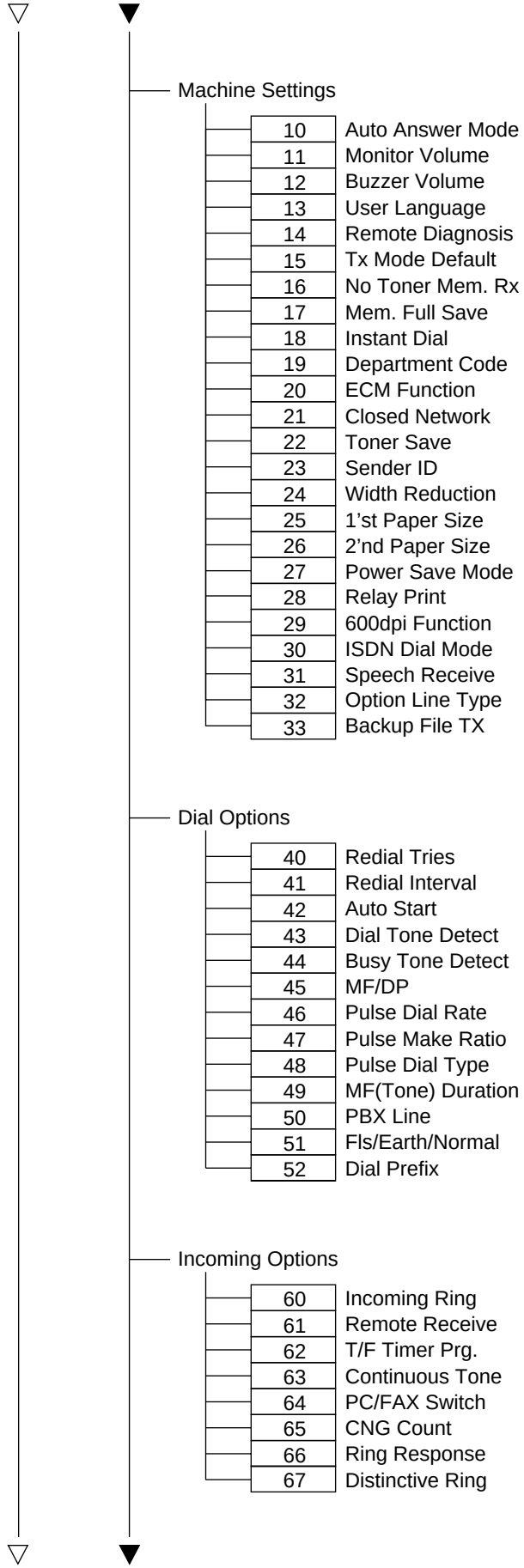
• Speed Access
If the function is assigned a speed access number, typing this number in at the menu display prompt in the first operational layer will bring up the setting or registration display in the fourth operational layer for direct access.

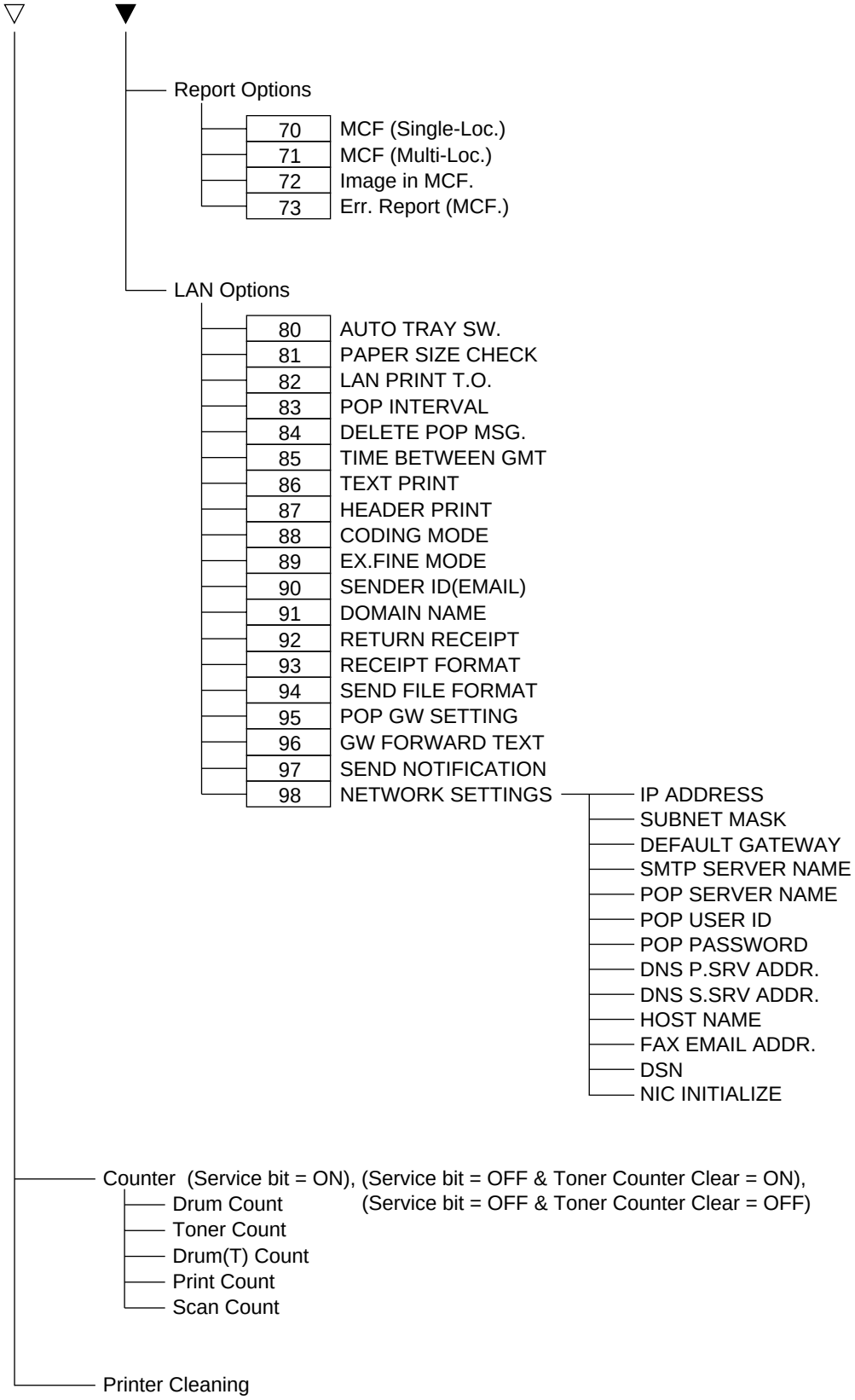
Note1: A speed access number must be entered with two digits. (It must not be entered with neither one digit nor three digits.)
Note2: Speed access numbers are fixed.
Some of them cannot be used (skipped) depending on the destination of delivery and whether the machine is equipped with any option. Access numbers become discontinous.

User functions

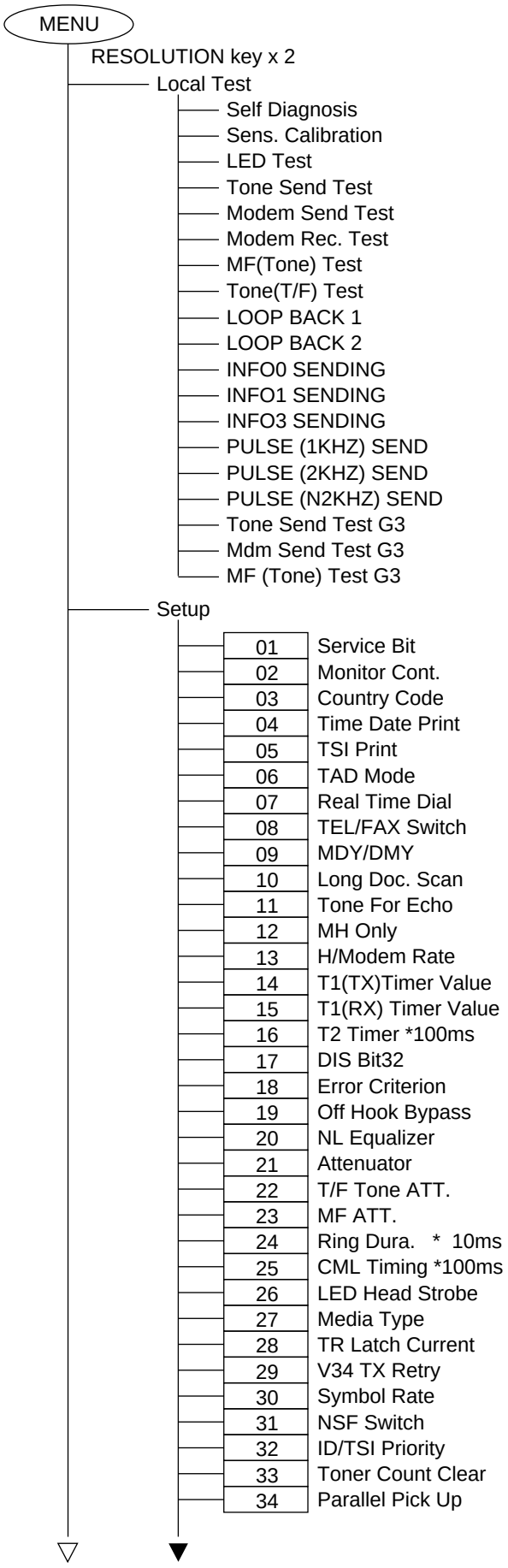


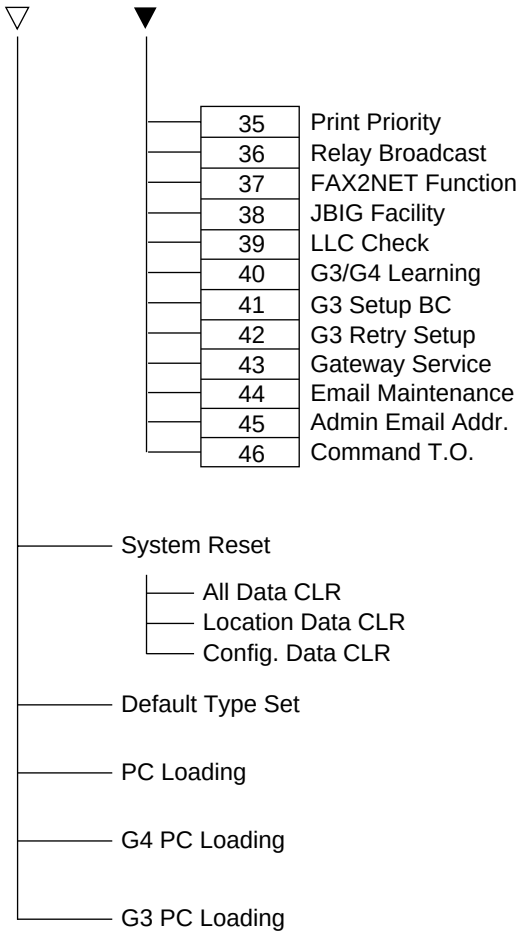
Note:
Options preceded by a number in ☐ permit speed access. Other options do not permit speed access.


Machine Settings
10 Auto Answer Mode
11 Monitor Volume
12 Buzzer Volume
13 User Language
14 Remote Diagnosis
15 Tx Mode Default
16 No Toner Mem. Rx
17 Mem. Full Save
18 Instant Dial
19 Department Code
20 ECM Function
21 Closed Network
22 Toner Save
23 Sender ID
24 Width Reduction
25 1’st Paper Size
26 2’nd Paper Size
27 Power Save Mode
28 Relay Print
29 600dpi Function
30 ISDN Dial Mode
31 Speech Receive
32 Option Line Type
33 Backup File TX
Dial Options
40 Redial Tries
41 Redial Interval
42 Auto Start
43 Dial Tone Detect
44 Busy Tone Detect
45 MF/DP
46 Pulse Dial Rate
47 Pulse Make Ratio
48 Pulse Dial Type
49 MF(Tone) Duration
50 PBX Line
51 Fls/Earth/Normal
52 Dial Prefix
Incoming Options
60 Incoming Ring
61 Remote Receive
62 T/F Timer Prg.
63 Continuous Tone
64 PC/FAX Switch
65 CNG Count
66 Ring Response
67 Distinctive Ring


Report Options
70
MCF (Single-Loc.)
71
MCF (Multi-Loc.)
72
Image in MCF.
73
Err. Report (MCF.)
LAN Options
80
AUTO TRAY SW.
81
PAPER SIZE CHECK
82
LAN PRINT T.O.
83
POP INTERVAL
84
DELETE POP MSG.
85
TIME BETWEEN GMT
86
TEXT PRINT
87
HEADER PRINT
88
CODING MODE
89
EX.FINE MODE
90
SENDER ID(EMAIL)
91
DOMAIN NAME
92
RETURN RECEIPT
93
RECEIPT FORMAT
94
SEND FILE FORMAT
95
POP GW SETTING
96
GW FORWARD TEXT
97
SEND NOTIFICATION
98
NETWORK SETTINGS
IP ADDRESS
SUBNET MASK
DEFAULT GATEWAY
SMTP SERVER NAME
POP SERVER NAME
POP USER ID
POP PASSWORD
DNS P.SRV ADDR.
DNS S.SRV ADDR.
HOST NAME
FAX EMAIL ADDR.
DSN
NIC INITIALIZE
Counter (Service bit = ON), (Service bit = OFF & Toner Counter Clear = ON),
(Service bit = OFF & Toner Counter Clear = OFF)
Drum Count
Toner Count
Drum(T) Count
Print Count
Scan Count
Printer Cleaning

Technical functions




35 Print Priority
36 Relay Broadcast
37 FAX2NET Function
38 JBIG Facility
39 LLC Check
40 G3/G4 Learning
41 G3 Setup BC
42 G3 Retry Setup
43 Gateway Service
44 Email Maintenance
45 Admin Email Addr.
46 Command T.O.
System Reset
All Data CLR
Location Data CLR
Config. Data CLR
Default Type Set
PC Loading
G4 PC Loading
G3 PC Loading

2.9.2 Technical Functions: Setup

1. This section explains items generally conducted by service personnel, not by users.

   (1) Step access
   1) The machine is standby state with no document.
   2) Press the MENU/EXIT key once.
   3) Press the RESOLUTION key twice within 3 second.
      The display will be shown the “TECHNICAL PRG.”.
   4) Press the SHIFT DOWN (↓) key.
      The menu option “2 SETUP” indicated by the blinking cursor is selected, and press the ENTER/SHIFT RIGHT (→) key.
   5) The display will be shown “SETUP”.
   6) You can access a desired function by switching among menus using SHIFT keys (↑, ↓, →, ←).

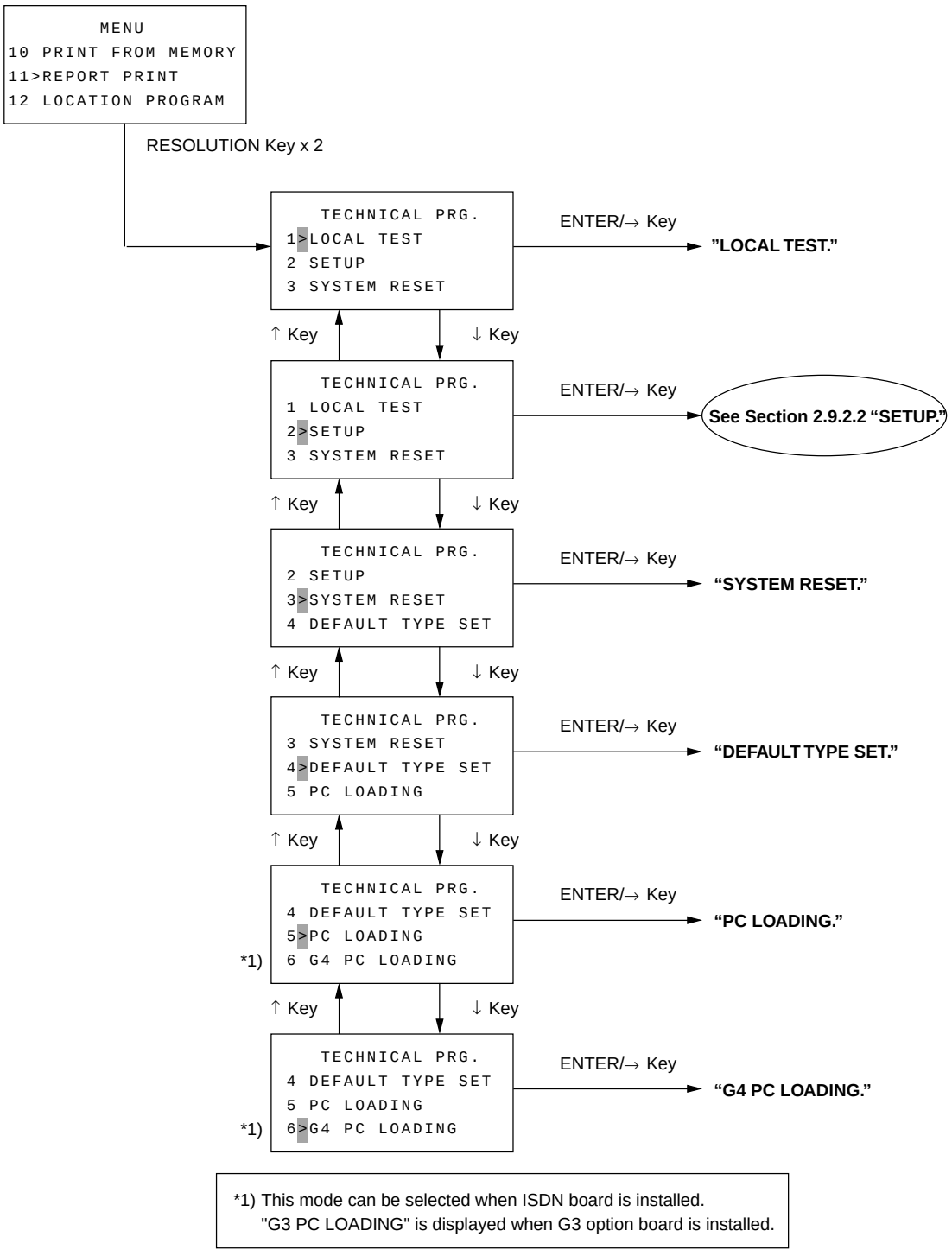
   (2) Speed access
   1) The machine is standby state with no document.
   2) Press the MENU/EXIT key once.
   3) Press the RESOLUTION key twice within 3 second.
      The display will be shown the “TECHNICAL PRG.”.
   4) Typing a speed access number in the “TECHNICAL PRG. XX” (XX: 01 to 46) display allows you to bring up the setting or registration screen directly.

2.9.2.1 Technical Functions Operation 1

Select Menu is shown as below:

1. Local Test
2. Technical Setup: Go to Section 2.9.2.2
3. System Reset
4. Default Type Set
5. PC Loading
6. G4 PC Loading or G3 PC Loading *2

**2 This mode can be selected when G3 option is installed.*

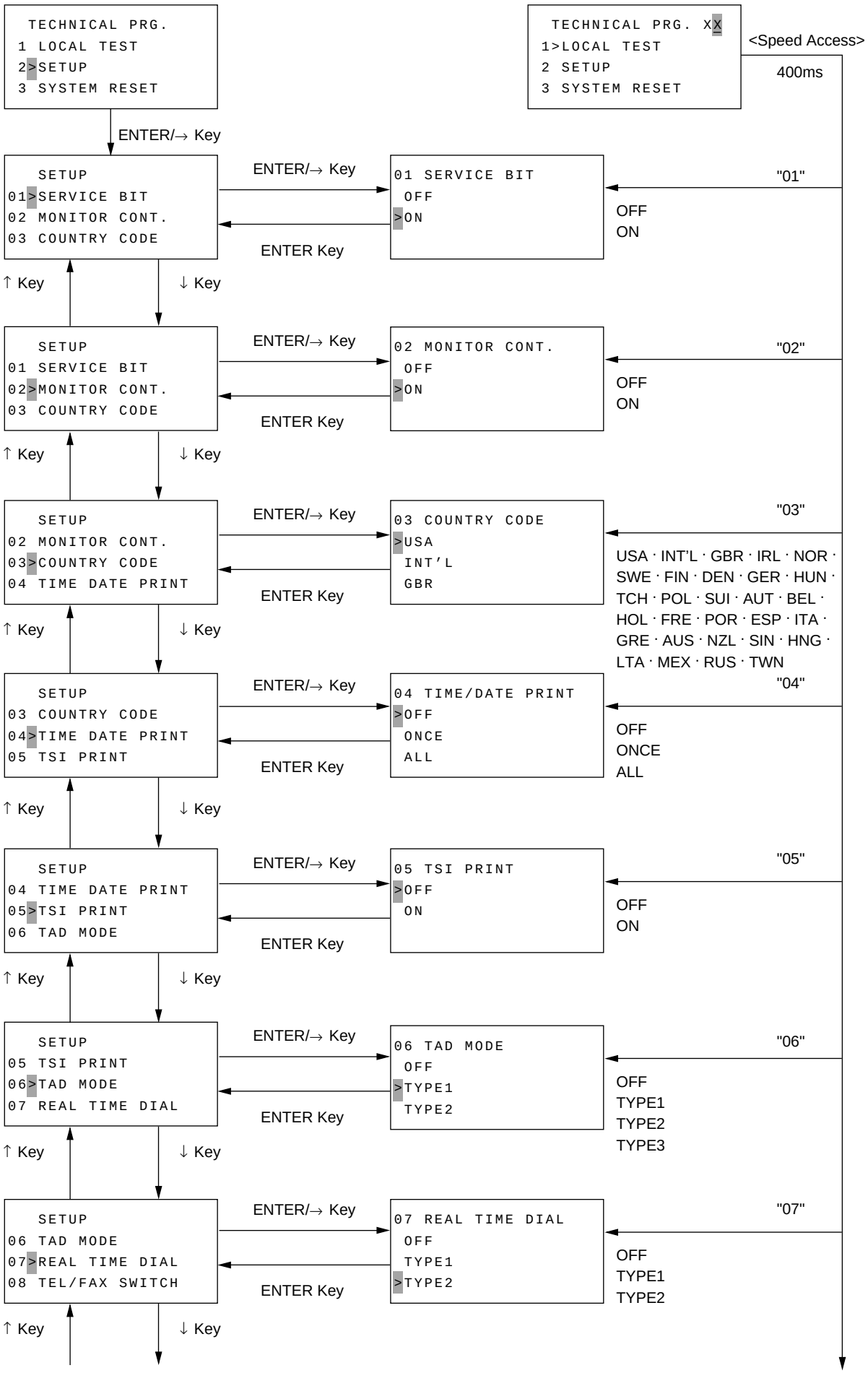


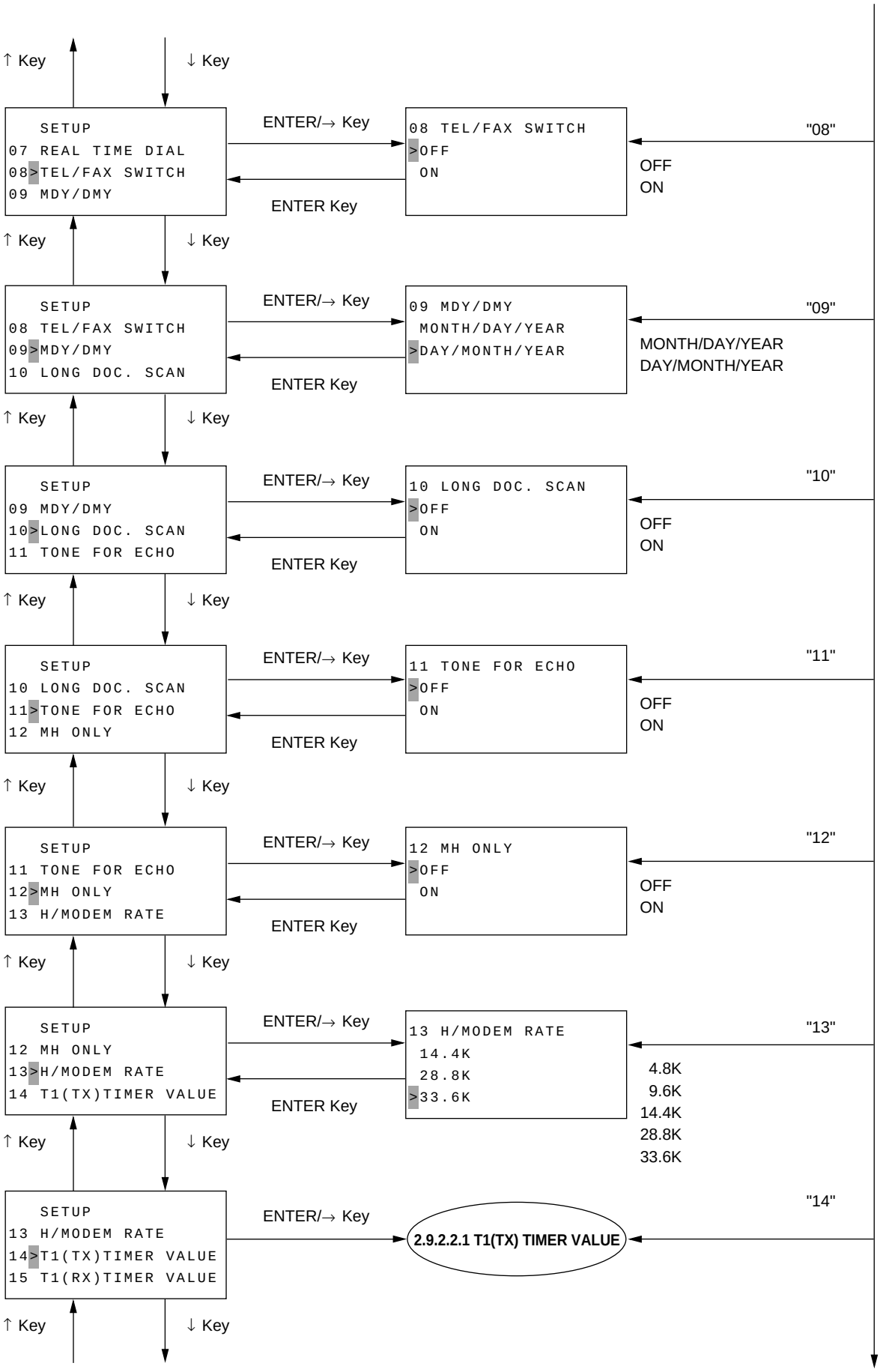
*1) This mode can be selected when ISDN board is installed.
"G3 PC LOADING" is displayed when G3 option board is installed.

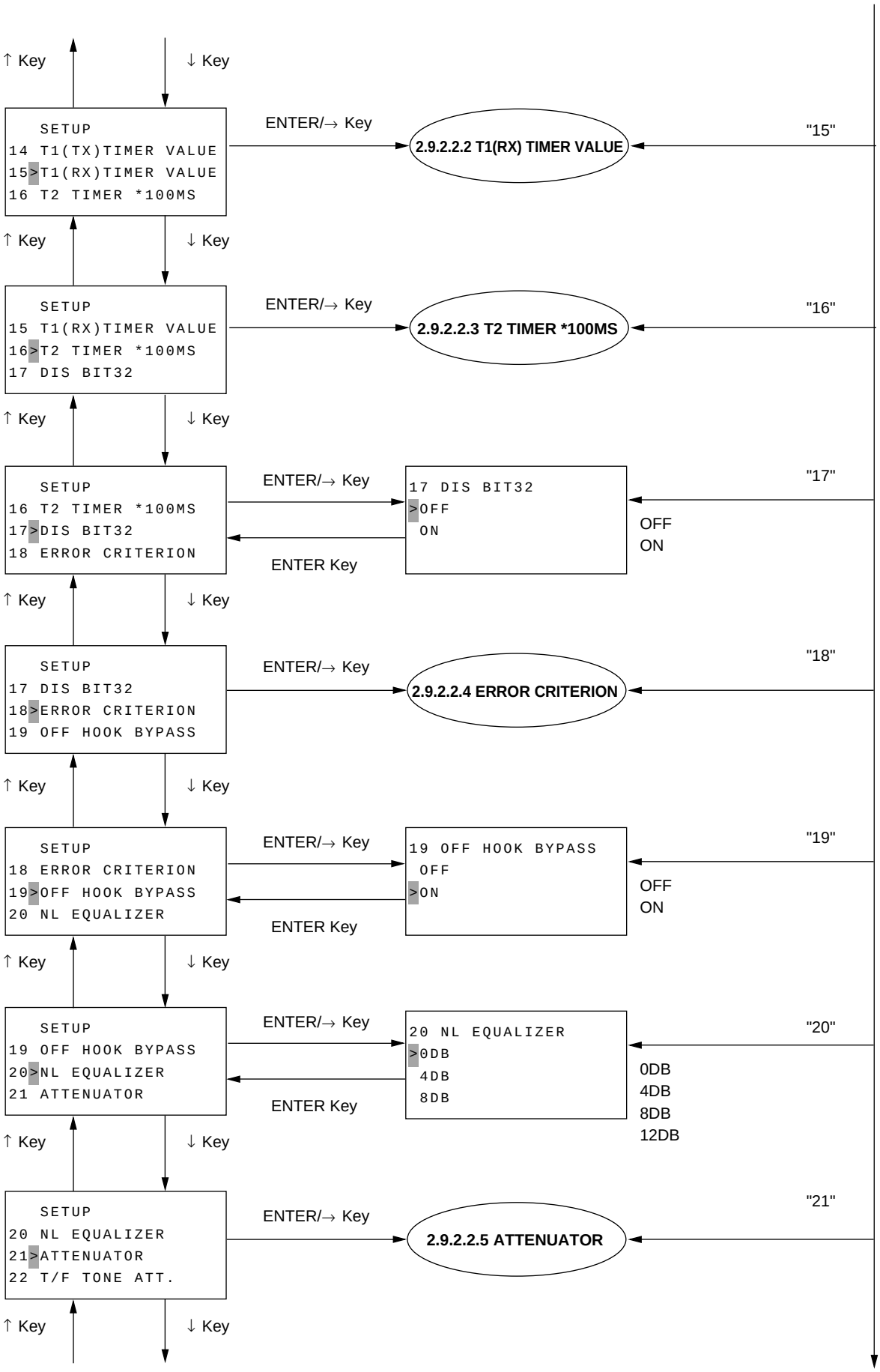
2.9.2.2 Technical Functions Operation 2

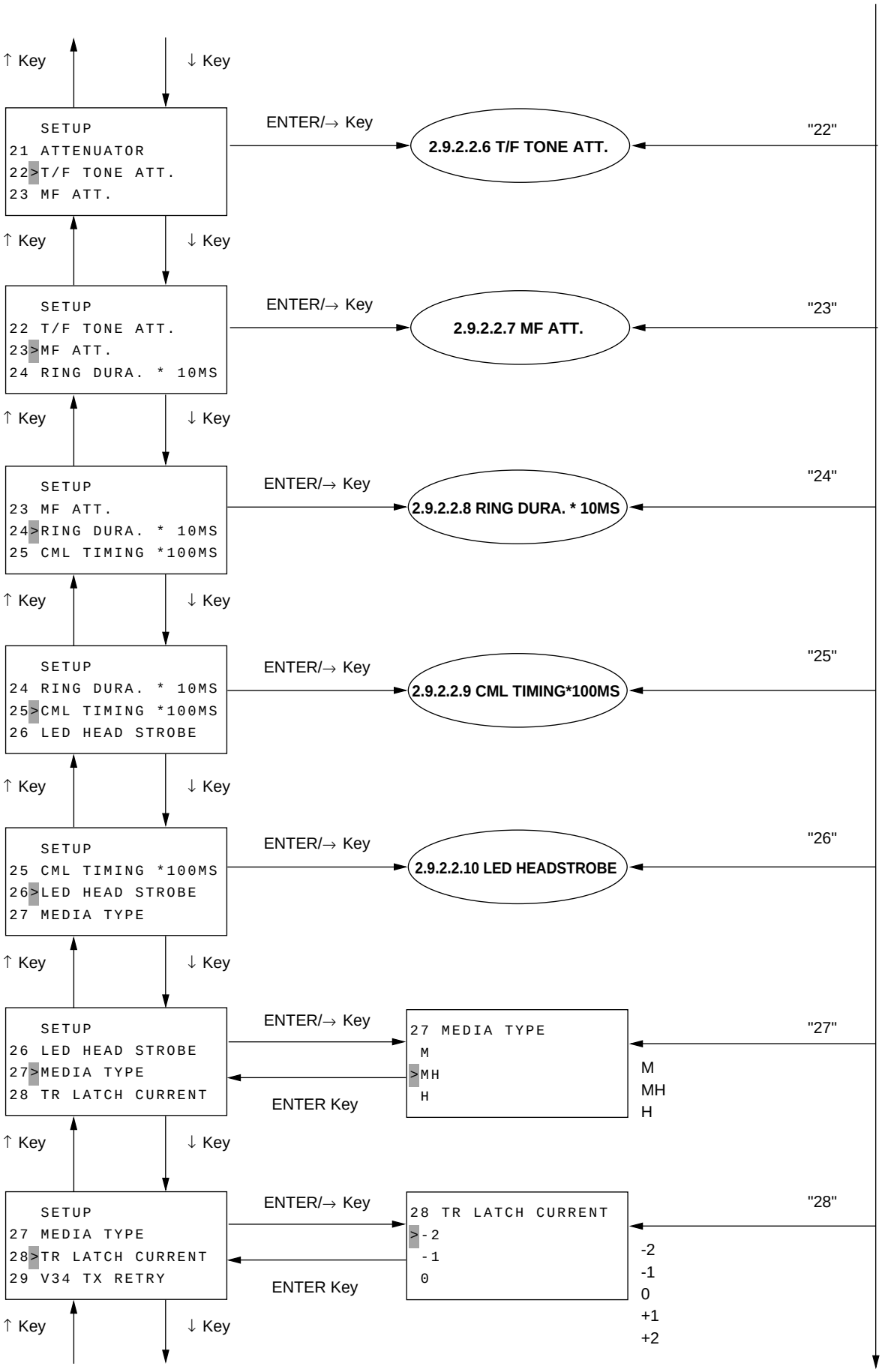
Setup	
01: Service Bit	(OFF/ON)
02: Monitor Cont.	(OFF/ON)
03: Country Code	(selecting the country code)
04: Time/Date Print	(OFF/ONCE/ALL)
05: TSI Print	(OFF/ON)
06: TAD Mode	(OFF/TYPE1/TYPE2/TYPE3)
07: Real Time Dial	(OFF/TYPE1/TYPE2)
08: TEL/FAX Switch	(OFF/ON)
09: MDY/DMY	(Month/Day/Year or Day/Month/Year)
10: Long Doc. Scan	(OFF/ON)
11: Tone For Echo	(OFF/ON)
12: MH Only	(OFF/ON)
13: H/Modem Rate	(4.8/9.6/14.4/28.8/33.6k)
14: T1(TX) Timer Value	(10 to 255)
15: T1(RX) Timer Value	(10 to 255)
16: T2 Timer *100ms	(1 to 255) *100ms
17: DIS Bit32	(OFF/ON)
18: Error Criterion	(0 to 99%)
19: OFF Hook Bypass	(OFF/ON)
20: NL Equalizer	(0/4/8/12dB)
21: Attenutor	(0 to 15dB) Country code≠FRE, (7 to 15dB) Country code=FRE
22: TF Tone Attenutor	(0 to 15dB)
23: MF Attenutor	(0 to 15dB)
24: Ring Dura. *10ms	(10 to 99) *10ms
25: CML Timing *100ms	(1 to 19) *100ms
26: LED Head Strobe	(00000 to 11111)
27: Media Type	(M/MH/H)
28: TR Latch Current	(-2/-1/0/+1/+2)
29: V34 TX Retry	(OFF/ON)
30: Symbol Rate	(2400/3000/3200/3429)
31: NSF Switch	(OFF/ON)
32: ID/TSI Priority	(ID/TSI)
33: Toner Count Clear	(OFF/ON)
34: Parallel Pick Up	(OFF/ON)
35: Print Priority	(OFF/ON)
36: Relay Broadcast	(OFF/ON)
37: FAX2NET Function	(OFF/ON)
38: JBIG Facility	(OFF/ON)
39: LLC Check	(OFF/ON)
40: G3/G4 Learning	(OFF/ON)
41: G3 Setup BC	(3.1KHz/SPEECH)
42: G3 Retry Setup	(OFF/ON)
43: Gateway Service	(OFF/ON)
44: E-mail Maintenance	(OFF/ON)
45: ADMIN E-mail ADDR.	
46: Command T.O.	(5 sec/30 sec/5 min)

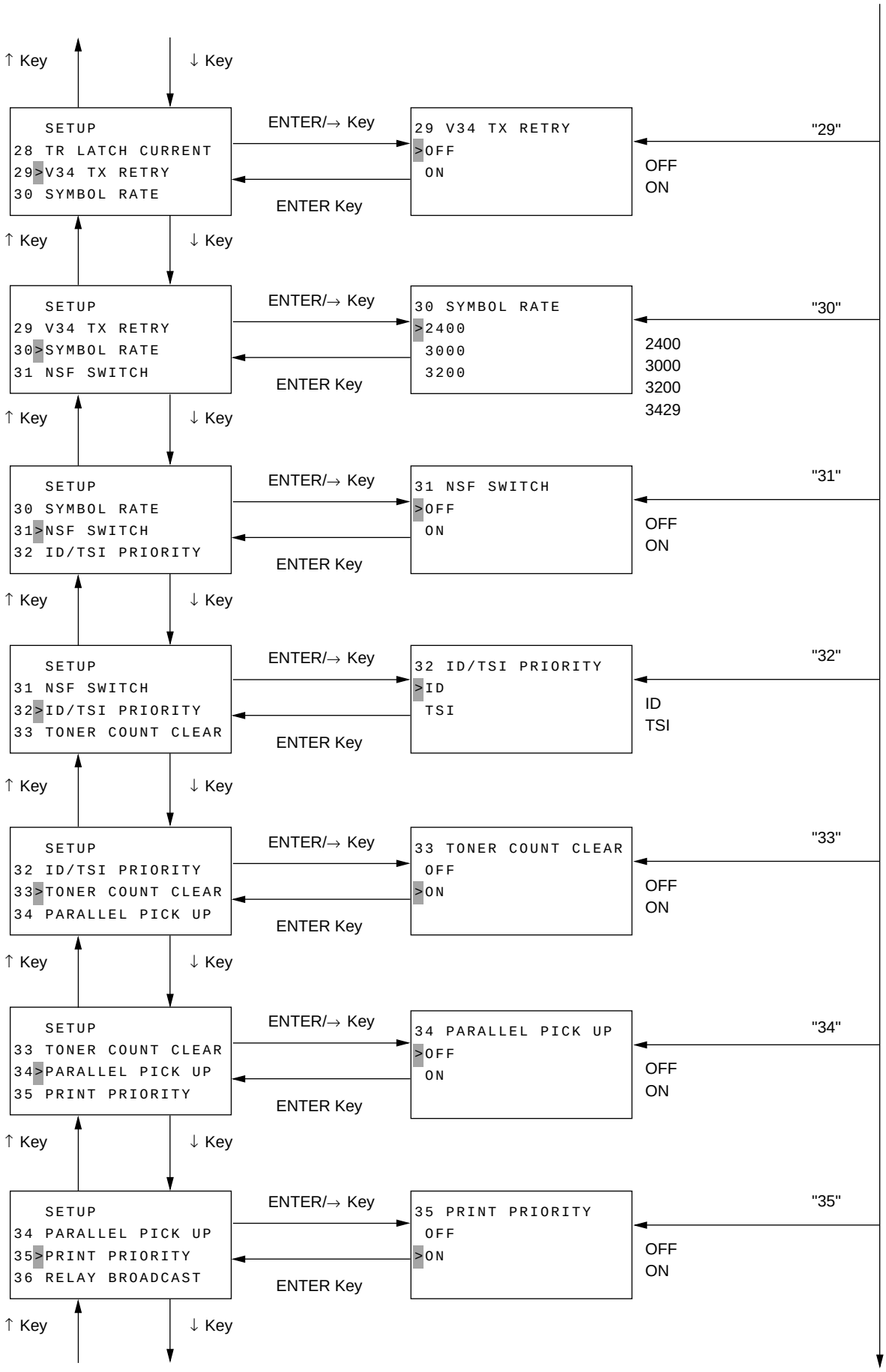
See Table 2.9.2.3 Technical Functions (Setup) for the detail.

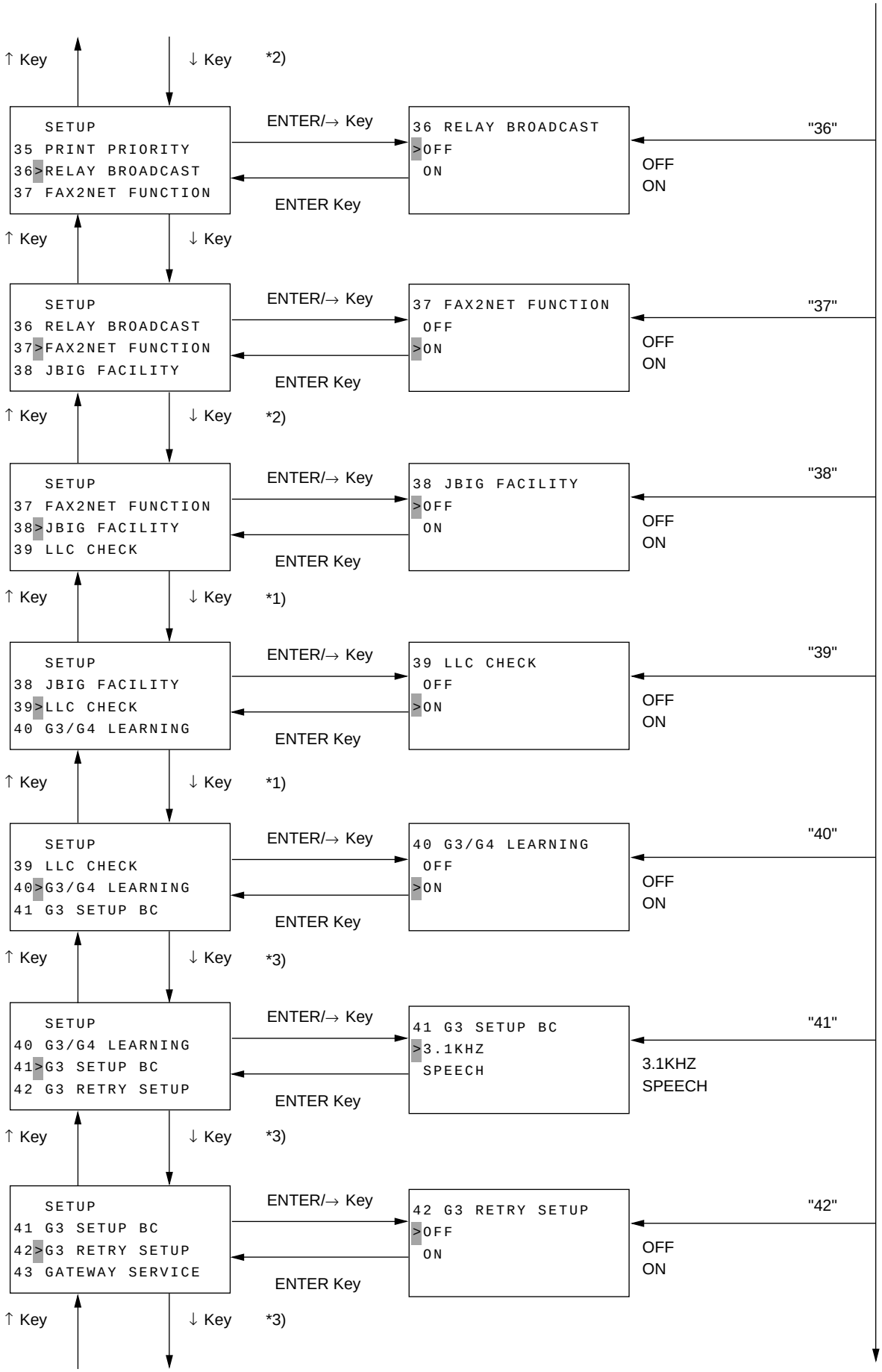

TECHNICAL PRG.
1 LOCAL TEST
2>SETUP
3 SYSTEM RESET
TECHNICAL PRG. XX
1>LOCAL TEST
2 SETUP
3 SYSTEM RESET
<Speed Access>
400ms
ENTER/→ Key
SETUP
01>SERVICE BIT
02 MONITOR CONT.
03 COUNTRY CODE
01 SERVICE BIT
OFF
>ON
"01"
OFF
ON
ENTER Key
↑ Key
↓ Key
SETUP
01 SERVICE BIT
02>MONITOR CONT.
03 COUNTRY CODE
02 MONITOR CONT.
OFF
>ON
"02"
OFF
ON
SETUP
02 MONITOR CONT.
03>COUNTRY CODE
04 TIME DATE PRINT
03 COUNTRY CODE
>USA
INT'L
GBR
"03"
USA · INT'L · GBR · IRL · NOR ·
SWE · FIN · DEN · GER · HUN ·
TCH · POL · SUI · AUT · BEL ·
HOL · FRE · POR · ESP · ITA ·
GRE · AUS · NZL · SIN · HNG ·
LTA · MEX · RUS · TWN
SETUP
03 COUNTRY CODE
04>TIME DATE PRINT
05 TSI PRINT
04 TIME/DATE PRINT
>OFF
ONCE
ALL
"04"
OFF
ONCE
ALL
SETUP
04 TIME DATE PRINT
05>TSI PRINT
06 TAD MODE
05 TSI PRINT
>OFF
ON
"05"
OFF
ON
SETUP
05 TSI PRINT
06>TAD MODE
07 REAL TIME DIAL
06 TAD MODE
OFF
>TYPE1
TYPE2
"06"
OFF
TYPE1
TYPE2
TYPE3
SETUP
06 TAD MODE
07>REAL TIME DIAL
08 TEL/FAX SWITCH
07 REAL TIME DIAL
OFF
TYPE1
>TYPE2
"07"
OFF
TYPE1
TYPE2

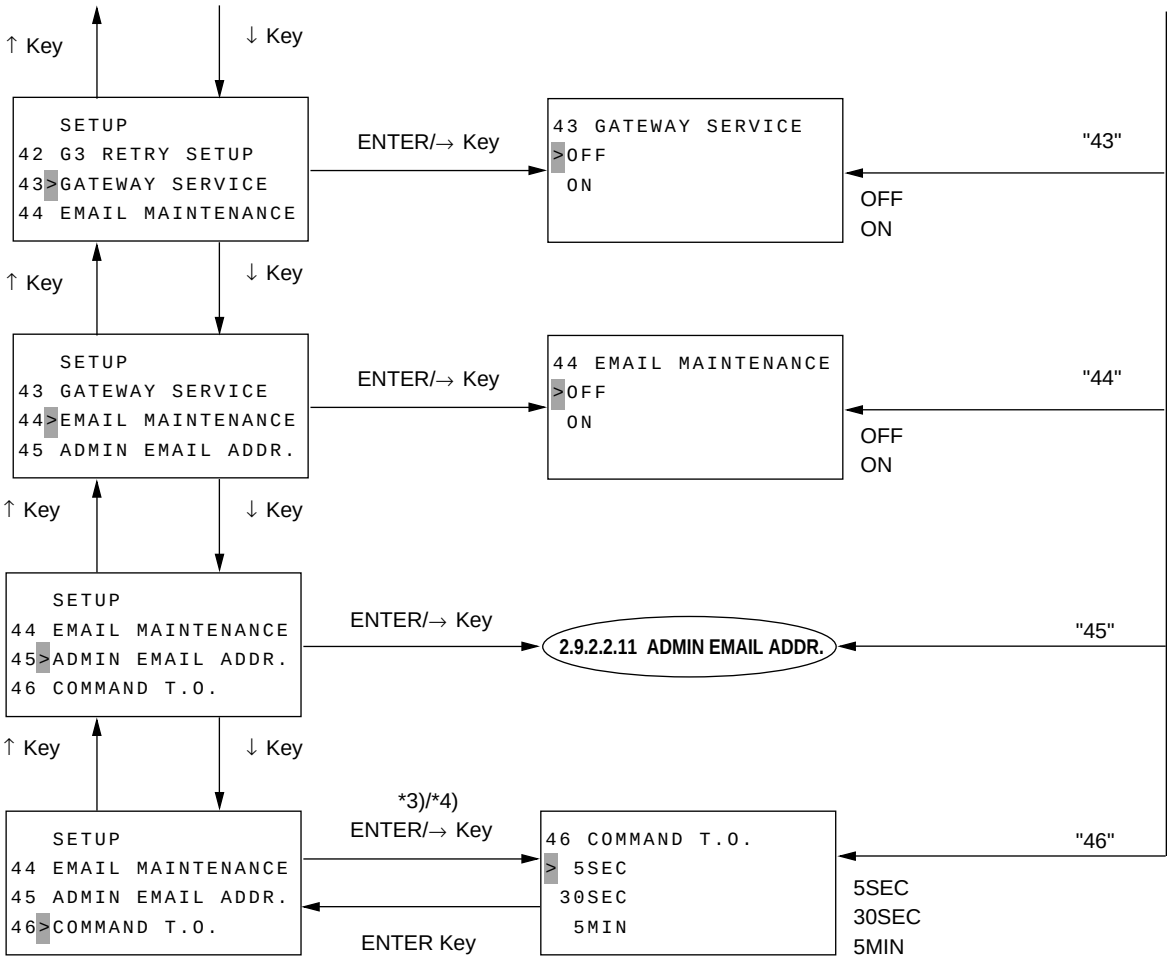

↑ Key
↓ Key
SETUP
07 REAL TIME DIAL
08>TEL/FAX SWITCH
09 MDY/DMY
ENTER/→ Key
ENTER Key
08 TEL/FAX SWITCH
>OFF
ON
"08"
OFF
ON
SETUP
08 TEL/FAX SWITCH
09>MDY/DMY
10 LONG DOC. SCAN
09 MDY/DMY
MONTH/DAY/YEAR
>DAY/MONTH/YEAR
"09"
MONTH/DAY/YEAR
DAY/MONTH/YEAR
SETUP
09 MDY/DMY
10>LONG DOC. SCAN
11 TONE FOR ECHO
10 LONG DOC. SCAN
>OFF
ON
"10"
OFF
ON
SETUP
10 LONG DOC. SCAN
11>TONE FOR ECHO
12 MH ONLY
11 TONE FOR ECHO
>OFF
ON
"11"
OFF
ON
SETUP
11 TONE FOR ECHO
12>MH ONLY
13 H/MODEM RATE
12 MH ONLY
>OFF
ON
"12"
OFF
ON
SETUP
12 MH ONLY
13>H/MODEM RATE
14 T1(TX)TIMER VALUE
13 H/MODEM RATE
14.4K
28.8K
>33.6K
"13"
4.8K
9.6K
14.4K
28.8K
33.6K
SETUP
13 H/MODEM RATE
14>T1(TX)TIMER VALUE
15 T1(RX)TIMER VALUE
2.9.2.2.1 T1(TX) TIMER VALUE
"14"


↑ Key
↓ Key
SETUP
14 T1(TX)TIMER VALUE
15>T1(RX)TIMER VALUE
16 T2 TIMER *100MS
ENTER/→ Key
2.9.2.2.2 T1(RX) TIMER VALUE
"15"
SETUP
15 T1(RX)TIMER VALUE
16>T2 TIMER *100MS
17 DIS BIT32
2.9.2.2.3 T2 TIMER *100MS
"16"
SETUP
16 T2 TIMER *100MS
17>DIS BIT32
18 ERROR CRITERION
17 DIS BIT32
>OFF
ON
"17"
OFF
ON
ENTER Key
SETUP
17 DIS BIT32
18>ERROR CRITERION
19 OFF HOOK BYPASS
2.9.2.2.4 ERROR CRITERION
"18"
SETUP
18 ERROR CRITERION
19>OFF HOOK BYPASS
20 NL EQUALIZER
19 OFF HOOK BYPASS
OFF
>ON
"19"
SETUP
19 OFF HOOK BYPASS
20>NL EQUALIZER
21 ATTENUATOR
20 NL EQUALIZER
>0DB
4DB
8DB
"20"
0DB
4DB
8DB
12DB
SETUP
20 NL EQUALIZER
21>ATTENUATOR
22 T/F TONE ATT.
2.9.2.2.5 ATTENUATOR
"21"


↑ Key
↓ Key
SETUP
21 ATTENUATOR
22>T/F TONE ATT.
23 MF ATT.
ENTER/→ Key
2.9.2.2.6 T/F TONE ATT.
"22"
SETUP
22 T/F TONE ATT.
23>MF ATT.
24 RING DURA. * 10MS
2.9.2.2.7 MF ATT.
"23"
SETUP
23 MF ATT.
24>RING DURA. * 10MS
25 CML TIMING *100MS
2.9.2.2.8 RING DURA. * 10MS
"24"
SETUP
24 RING DURA. * 10MS
25>CML TIMING *100MS
26 LED HEAD STROBE
2.9.2.2.9 CML TIMING*100MS
"25"
SETUP
25 CML TIMING *100MS
26>LED HEAD STROBE
27 MEDIA TYPE
2.9.2.2.10 LED HEADSTROBE
"26"
SETUP
26 LED HEAD STROBE
27>MEDIA TYPE
28 TR LATCH CURRENT
27 MEDIA TYPE
M
>MH
H
ENTER Key
"27"
M
MH
H
SETUP
27 MEDIA TYPE
28>TR LATCH CURRENT
29 V34 TX RETRY
28 TR LATCH CURRENT
>-2
-1
0
ENTER Key
"28"
-2
-1
0
+1
+2


↑ Key
↓ Key
SETUP
28 TR LATCH CURRENT
29>V34 TX RETRY
30 SYMBOL RATE
ENTER/→ Key
ENTER Key
29 V34 TX RETRY
>OFF
ON
"29"
OFF
ON
SETUP
29 V34 TX RETRY
30>SYMBOL RATE
31 NSF SWITCH
30 SYMBOL RATE
>2400
3000
3200
"30"
2400
3000
3200
3429
SETUP
30 SYMBOL RATE
31>NSF SWITCH
32 ID/TSI PRIORITY
31 NSF SWITCH
>OFF
ON
"31"
SETUP
31 NSF SWITCH
32>ID/TSI PRIORITY
33 TONER COUNT CLEAR
32 ID/TSI PRIORITY
>ID
TSI
"32"
ID
TSI
SETUP
32 ID/TSI PRIORITY
33>TONER COUNT CLEAR
34 PARALLEL PICK UP
33 TONER COUNT CLEAR
OFF
>ON
"33"
SETUP
33 TONER COUNT CLEAR
34>PARALLEL PICK UP
35 PRINT PRIORITY
34 PARALLEL PICK UP
>OFF
ON
"34"
SETUP
34 PARALLEL PICK UP
35>PRINT PRIORITY
36 RELAY BROADCAST
35 PRINT PRIORITY
OFF
>ON
"35"


↑ Key
↓ Key
*2)
SETUP
35 PRINT PRIORITY
36>RELAY BROADCAST
37 FAX2NET FUNCTION
ENTER/→ Key
ENTER Key
36 RELAY BROADCAST
>OFF
ON
"36"
OFF
ON
↑ Key
↓ Key
SETUP
36 RELAY BROADCAST
37>FAX2NET FUNCTION
38 JBIG FACILITY
ENTER/→ Key
ENTER Key
37 FAX2NET FUNCTION
OFF
>ON
"37"
OFF
ON
↑ Key
↓ Key
*2)
SETUP
37 FAX2NET FUNCTION
38>JBIG FACILITY
39 LLC CHECK
ENTER/→ Key
ENTER Key
38 JBIG FACILITY
>OFF
ON
"38"
OFF
ON
↑ Key
↓ Key
*1)
SETUP
38 JBIG FACILITY
39>LLC CHECK
40 G3/G4 LEARNING
ENTER/→ Key
ENTER Key
39 LLC CHECK
OFF
>ON
"39"
OFF
ON
↑ Key
↓ Key
*1)
SETUP
39 LLC CHECK
40>G3/G4 LEARNING
41 G3 SETUP BC
ENTER/→ Key
ENTER Key
40 G3/G4 LEARNING
OFF
>ON
"40"
OFF
ON
↑ Key
↓ Key
*3)
SETUP
40 G3/G4 LEARNING
41>G3 SETUP BC
42 G3 RETRY SETUP
ENTER/→ Key
ENTER Key
41 G3 SETUP BC
>3.1KHZ
SPEECH
"41"
3.1KHZ
SPEECH
↑ Key
↓ Key
*3)
SETUP
41 G3 SETUP BC
42>G3 RETRY SETUP
43 GATEWAY SERVICE
ENTER/→ Key
ENTER Key
42 G3 RETRY SETUP
>OFF
ON
"42"
OFF
ON
↑ Key
↓ Key
*3)

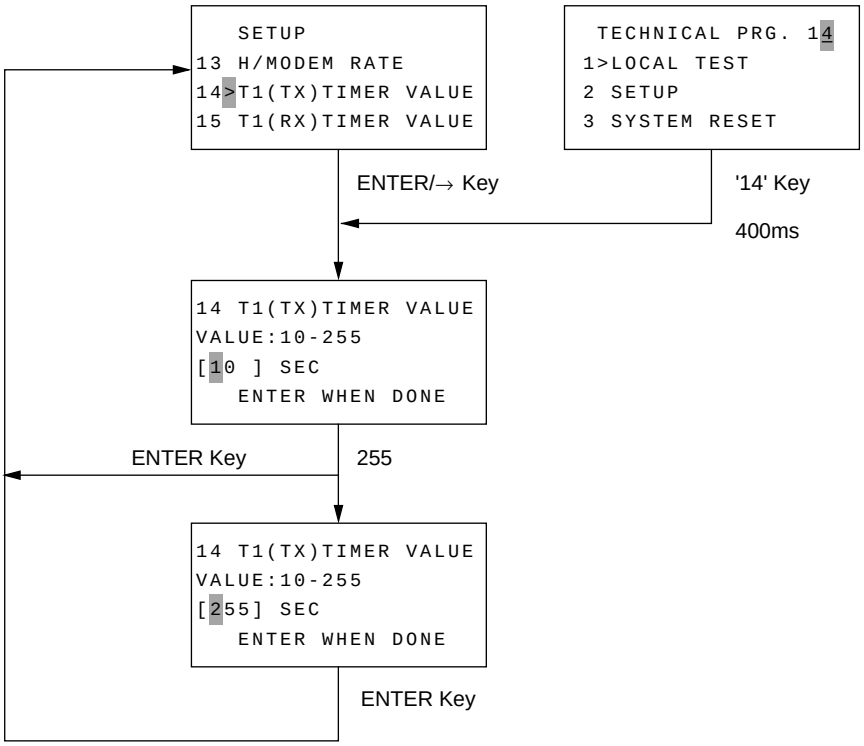


Some options of the SETUP menu cannot be selected depending on the destination of delivery, machine specs, and machine settings. However, numbers related to speed access are fixed.
If there are unselective options, these numbers become discontinuous.

*1):This mode can be made only when ISDN board is installed. "FUNC.NOT AVAIL" is indicated during 3 seconds by pressing ENTER/→key in the case of MUPIS I/F mode.
*2):FX-056VP will be skipped and cannot be set. (This mode can be operated only when FX-176VP.)
*3):This mode can be set only when NIC TYPE2 (IFAX is available.) is installed.
*4):"FUNC.NOT AVAIL" is indicated during 3 seconds by pressing ENTER/→ key in case of I/F error.

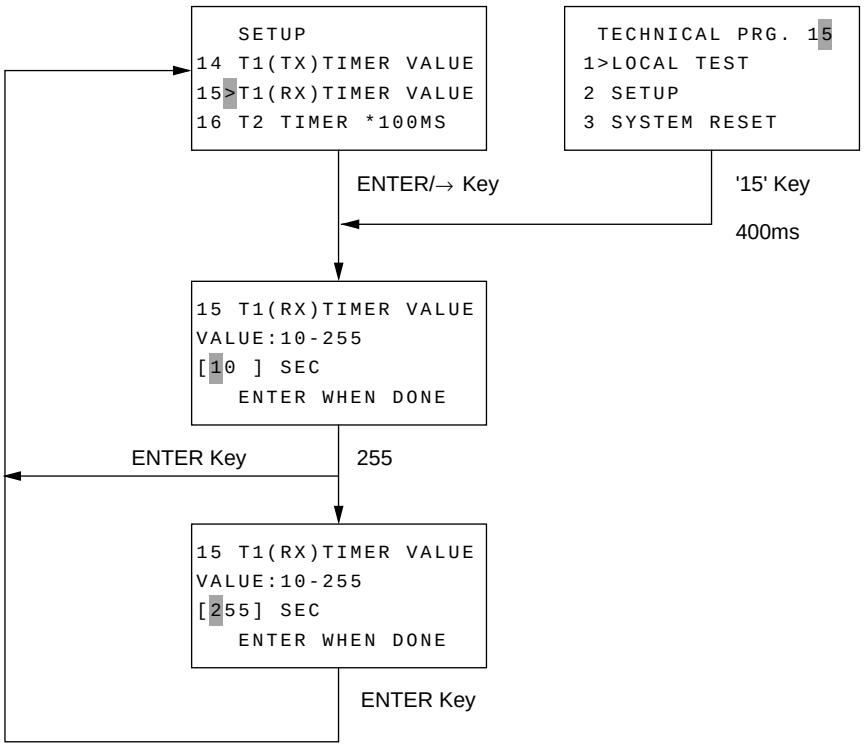
2.9.2.2.1 T1 (TX) Timer Value

Set the T1 timer (call connection wait time: XTTO) for transmission.



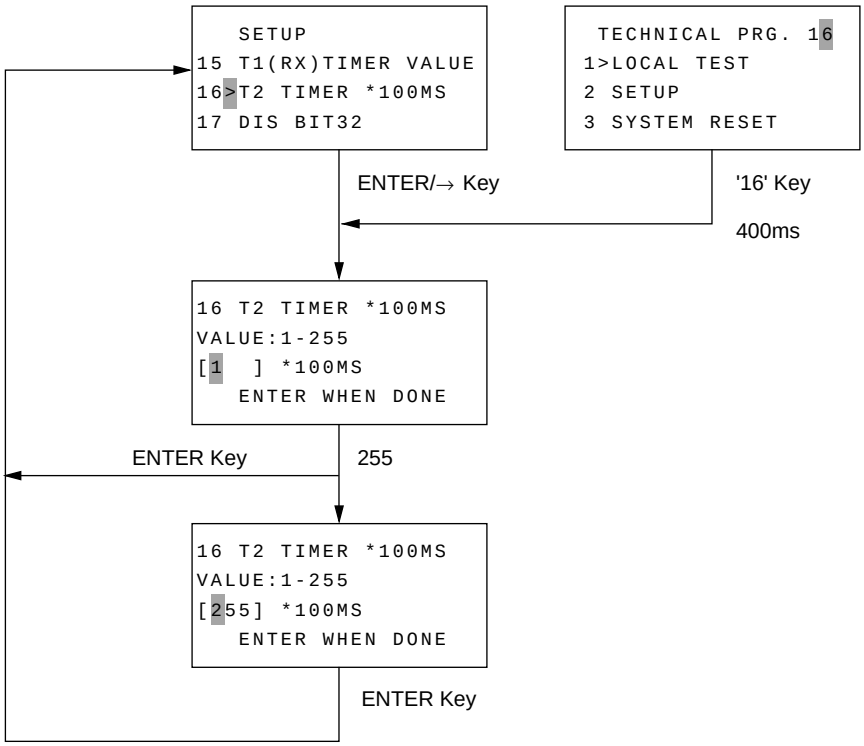
2.9.2.2.2 T1 (RX) Timer Value

Set the T1 timer for reception.
The time from issue of the first DIS to issue of a signal is checked. If a time-out occurs, the line is disconnected.



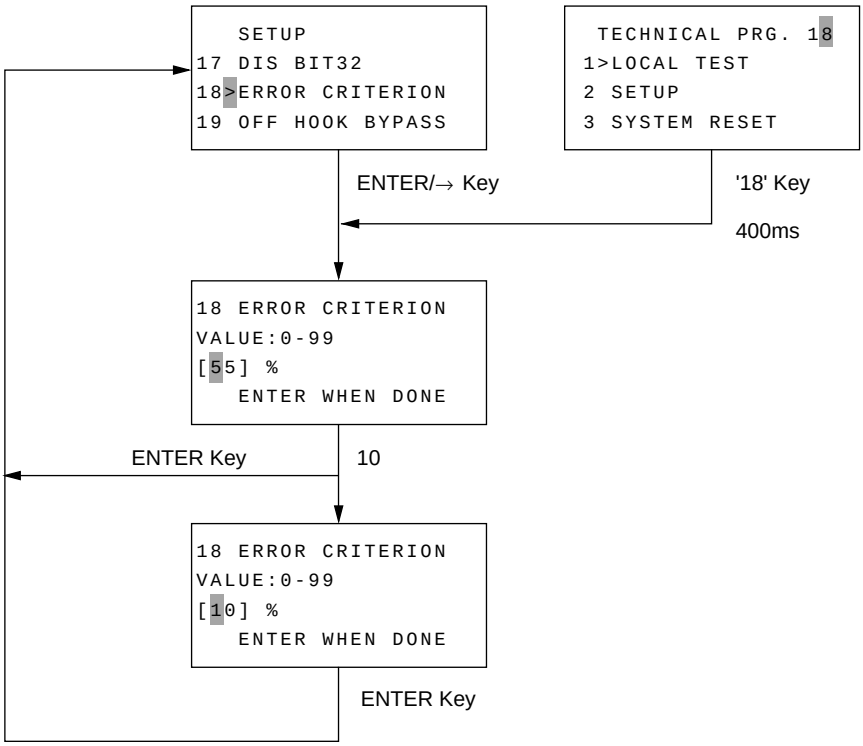
2.9.2.2.3 T2 Timer *100ms

Registers the time duration (in seconds) for which the fax detects the EOL interval during reception of phase C. The fax disconnects the line when EOL can not detect within T2 Timer.



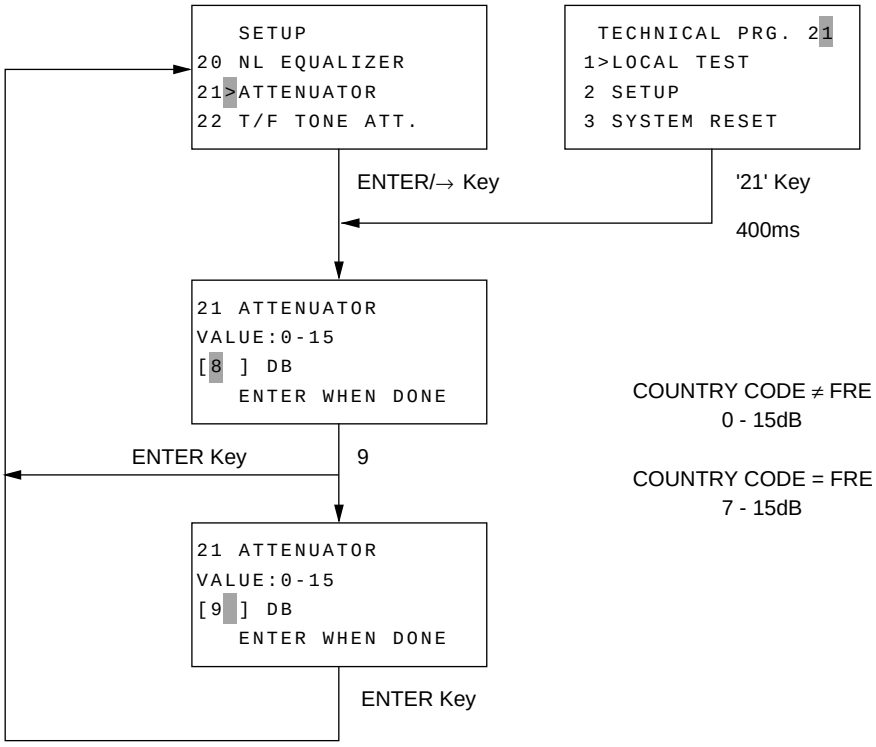
2.9.2.2.4 Error Criterion

Registers the threshould value whether to transmit RTN or MCF signal when the error occurs in received data.



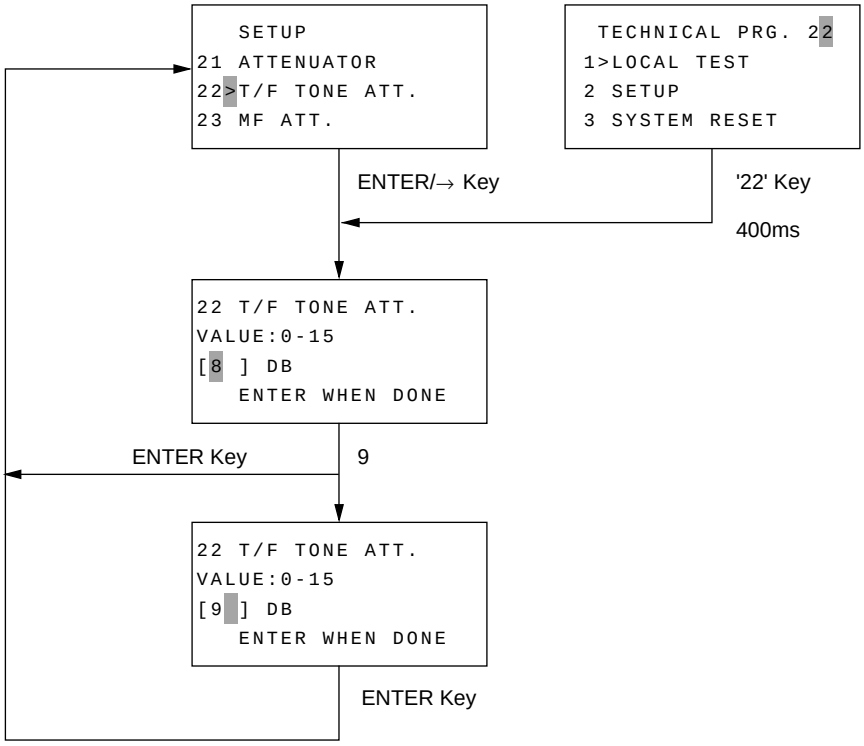
2.9.2.2.5 Attenuator

Adjusts the attenuation (dB) for the message send signal power level.
Adjusting value is 0 to 15dB in one dB steps.



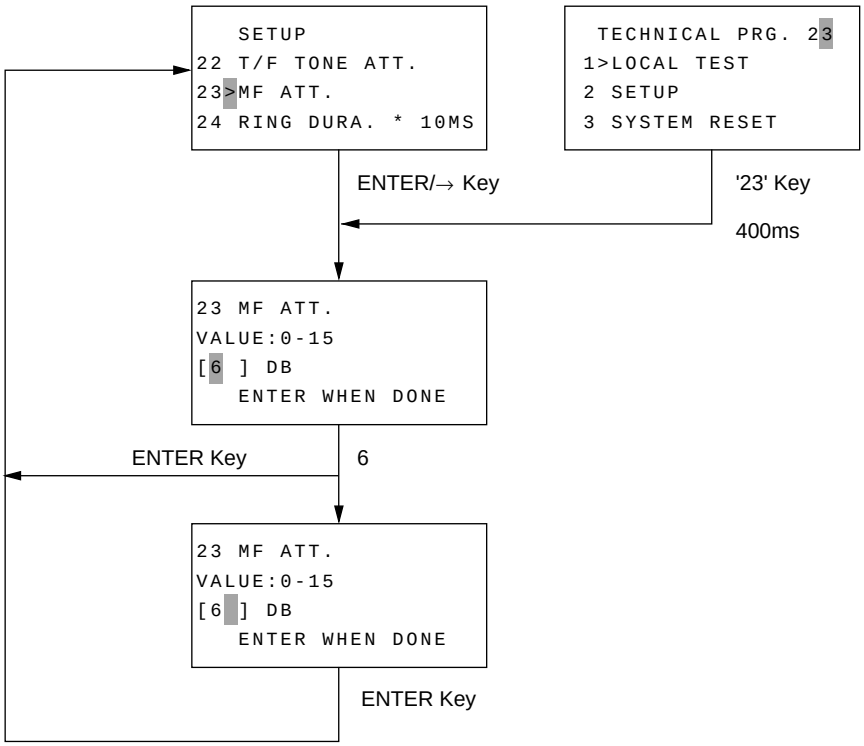
2.9.2.2.6 T/F Tone Att.

Adjusts the attenuation (dB) for the quasi-ring back tone send signal of TEL/FAX switching.
Adjusting value is 0 to 15dB in one dB steps.



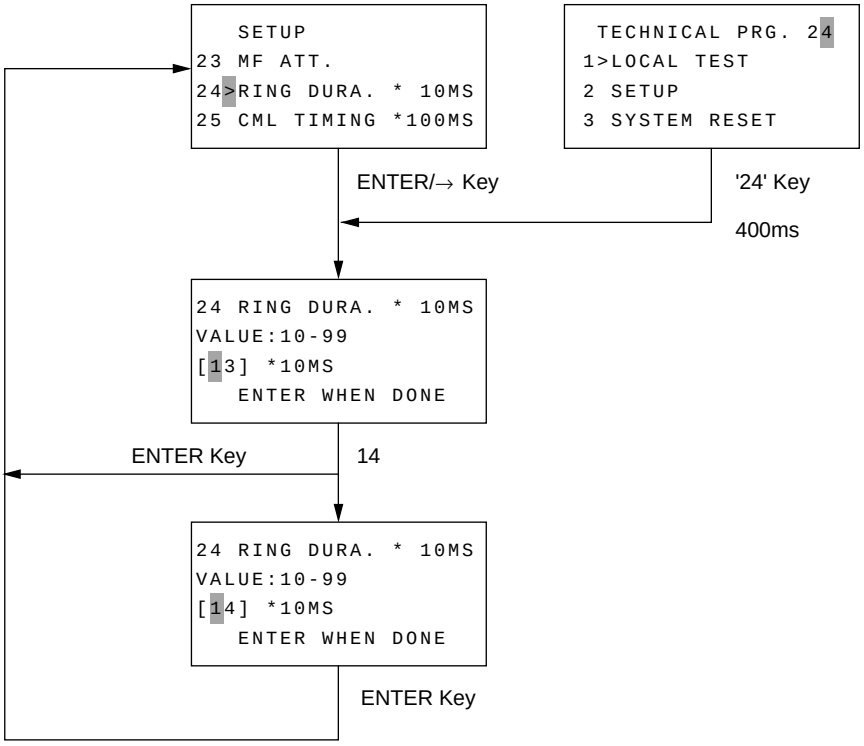
2.9.2.2.7 MF Att.

Adjusts the attenuation (dB) for the send MF tone power level.
Adjusting value is 0 to 15dB in one dB steps.



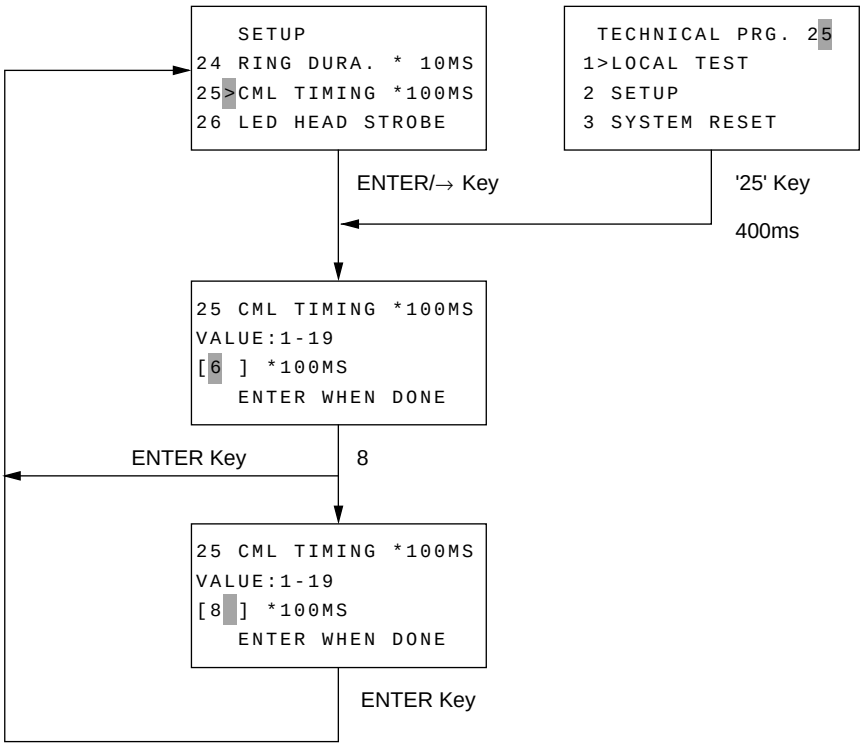
2.9.2.2.8 Ring Dura. *10ms

Selects the minimum ring detection time to meet country's requirements.
Adjusting time is 100MS to 990MS in 10MS steps.



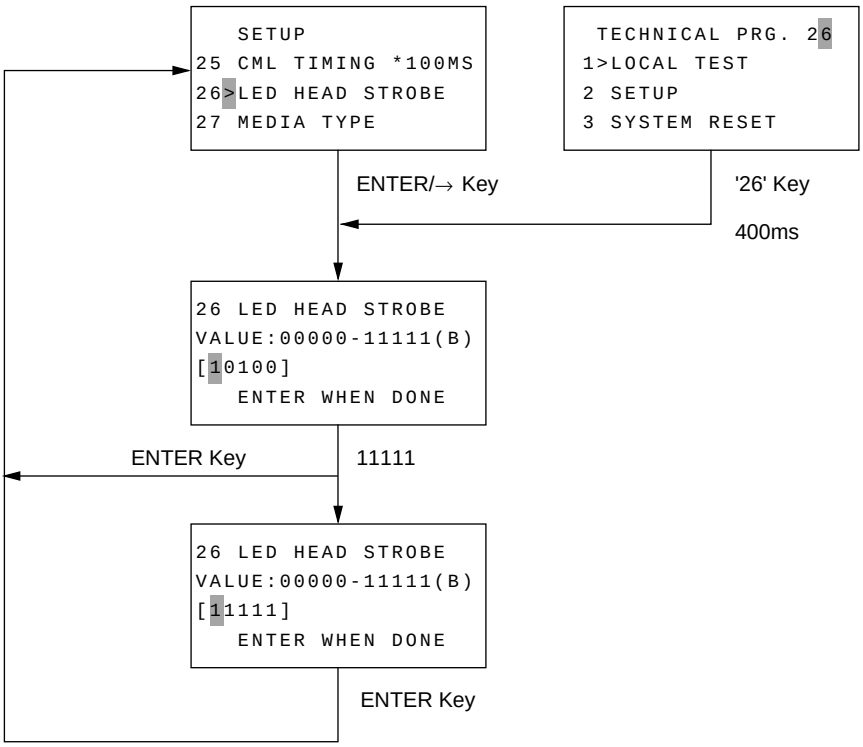
2.9.2.2.9 CML Timing *100ms

Selects the time from end of ring to CML-ON. Adjusting time is 100MS to 1900MS in 100MS steps.



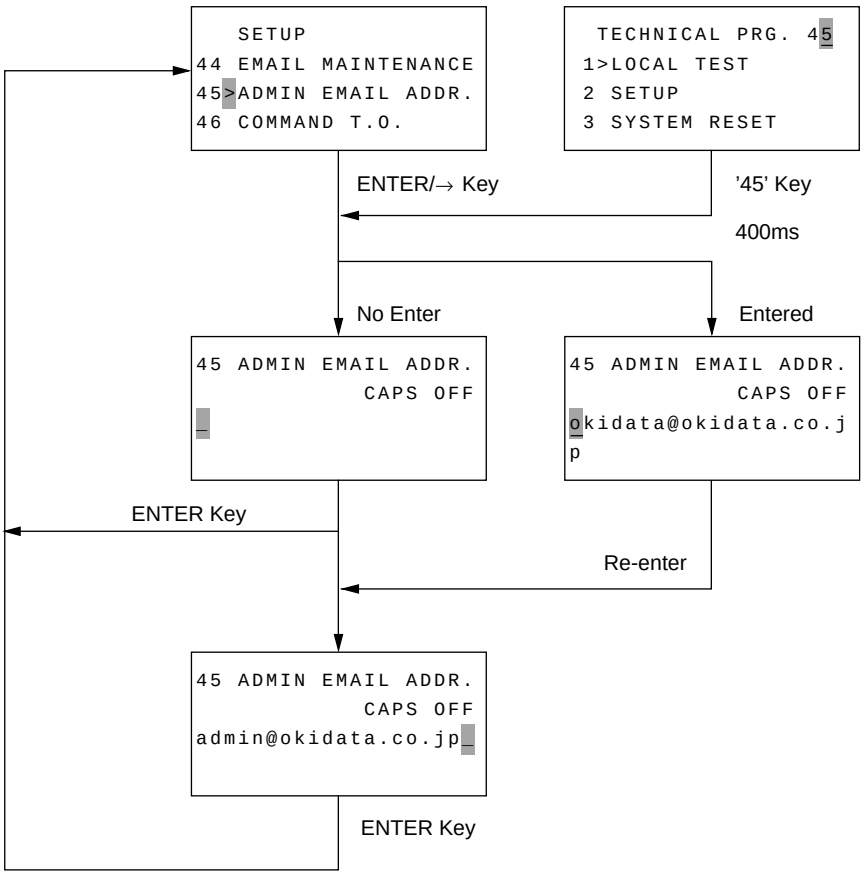
2.9.2.2.10 LED Headstrobe

Setting of LED print head strobe signals (00000 - 11111). Selection of strobe sidth in LED head. "00000" is lightest and "11111" is darkest.



* Five digits must be entered.
* When five digits have not entered, the ENTER key is not effective.

2.9.2.2.11 ADMIN Email Addr.



* ADMIN EMAIL ADDRESS can be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.2.3 Technical Functions (Setup)

- Table 2.9.2.3 shows the initial setting items and their purpose. (The default setting is different by the individual countries.)
- Each item can be accessed by entering it on Technical Setup.
- The detailed procedures of the initial settings items will be explained on the following tables.

The setting data must be transferred to the G3 Option side.
(encluding LLC CHECK, G3/G4 LEARNING, G3 SETUP BC, G3 RETRY SETUP, GATEWAY SERVICE, EMAIL MAINTENANCE, ADMIN EMAIL ADDR. and COMMAND T.O.)

Table 2.9.2.3 Technical Functions: Setup (1/12)

No.	Item	Specifications
01	Service Bit	Enables the serviceman to make special settings. If this setting is OFF, some settings and report print function may become unavailable. 1) Setting values ON: Enables the serviceman to make settings. OFF: Disables the serviceman to make settings.
02	Monitor Cont.	Sets up the line monitor. If this setting is OFF at the time of transmission, the line is monitored during dialing but the line will not be monitored after a specified time lapse (about 5 sec). If this setting is ON, the line will be monitored till the end of communication. G3 option line can be monitored. 1) Setting values ON (Monitored continuously)/OFF (Not monitored continuously) * The tone level can be adjusted by setting Monitor Volume.
03	Country Code	Set a country code. 1) Setting values Select a country code from: USA/INT'L/GBR/IRL/NOR/SWE/FN/DEN/GER/HUN/TCH/POL/SUI/AUT/BEL/HOL/FRE/POR/ESP/ITA/GRE/AUS/NZL/SIN/HNG/LTA/MEX/RUS/TWN
04	Time Date Print	Determine whether the date and time set on the local machine are to be printed at the beginning of the received image. 1) Setting values OFF (Not printed)/ONCE (Printed on page 1 only)/ALL (Printed on all pages)

Table 2.9.2.3 Technical Functions: Setup (2/12)

No.	Item	Specifications
05	TSI Print	Determine whether a TSI is to be printed in the received image. 1) Setting value ON (Printed)/OFF (Not printed) * When this setting is ON and TIME/DATE PRINT is set to ALL , a TSI is printed on all received pages. In other cases, a TSI is printed on the first page only. * When a TSI has not been registered but a personal ID has been registered, the personal ID is printed.
06	TAD Mode	Switches between TAD modes. This setting is required to determine whether TAD is to be selected in the AUTO ANSWER mode and set the fax operation to be performed after completion of TAD-side operation (response). In the TAD mode, a message is recorded in the telephone memory if the telephone (connected externally) answers automatically when the facsimile is ready for reception. After completion of message recording, the line is switched to the facsimile. If CNG is detected while the telephone is answering automatically, reception starts immediately. 1) Setting values OFF/TYPE1/TYPE2/TYPE3 selectable * Relationships between settings and operations are as follows: OFF: TAD cannot be selected in the AUTO ANSWER mode. TYPE1: When TAD operation ends without detecting CNG, the line is switched to the facsimile starting reception immediately. TYPE2: After completion of TAD operation, the machine returns to the standby state. TYPE3: The machine starts detecting CNG 15 seconds after the telephone starts the auto answering operation. If TAD operation ends without detecting CNG, the machine returns to the standby state. * When this setting is set to OFF in the TAD mode, the FAX mode will be selected automatically.

Table 2.9.2.3 Technical Functions: Setup (3/12)

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>07</td><td>Real Time Dial</td><td>Determine whether real-time dialing is enabled.
If it is enabled, determine when it will be enabled.

1) Setting values
OFF/TYPE1 (External telephone is off-hooked)/TYPE2

OFF: Real-time dialing is disabled (accumulated dialing only)
TYPE1: Enabled when the external telephone is off-hooked.
TYPE2: Enabled when the external telephone is off-hooked or the HOOK key is pressed.</td></tr>
<tr><td>08</td><td>TEL/FAX Switch</td><td>Determine whether the TEL/FAX mode can be selected in the AUTO ANSWER mode.

1) Setting values
ON (Selective)/OFF (Not selective)
* When OFF is selected in the TEL/FAX mode, the FAX mode will be selected automatically.</td></tr>
<tr><td>09</td><td>MDY/DMY</td><td>Select a date display mode for LCD display and report printing.

1) Setting value
MDY (Month/Day/Year)/DMY (Day/Month/Year)</td></tr>
<tr><td>10</td><td>Long Doc. Scan</td><td>Determine whether long documents (380 mm or longer) are to be scanned during transmission or copying.

1) Setting values
ON (1500 mm or 60 minutes)/OFF (380 mm or 60 minutes)
* 60 minutes = Transmission time</td></tr>
<tr><td>11</td><td>Tone For Echo</td><td>Determine whether an echo suppressor protection tone is to be added.
This setting is required when the line condition is poor (overseas communication, etc.).

1) Setting value
ON (Added)/OFF (Not added)

* During speed dial transmission, this setting is ignored because communication parameters are referenced.
* This setting affects the following settings:

<table>
<tr><td>Echo Protection</td><td>OFF</td><td>ON</td></tr>
<tr><td>Ignore 1st DIS</td><td>OFF</td><td>ON</td></tr>
<tr><td>CED-DIS Timer</td><td>75ms</td><td>1.5sec</td></tr>
<tr><td>Tone For Echo</td><td>OFF</td><td>ON</td></tr>
</table>
</td></tr>
</table>

Table 2.9.2.3 Technical Functions: Setup (4/12)

No.	Item	Specifications
12	MH Only	Determine whether only MH coding is to be handled forcibly. This setting is required when the line noise affects the received image. 1) Setting values ON (MH only)/OFF (JBIG; only FX-176VP, MMR, MR, or MH is selected depending on communication capacity)
13	H/MODEM Rate	Set the initial value of modem transmission speed. 1) Setting values 33.6/28.8/14.4/9.6/4.8K
14	T1 (TX) Timer Value	Set the T1 timer (call connection wait time: XTTO) for transmission. T1 (TX) is a time to detect up to 3 flags of DIS sent from a called fax machine. This timer sets the time that lapses from the moment the last digit has been transmitted to the moment the line is disconnected. 1) Setting values 10-255 selectable (in 1 second steps) * Enter a value using ten-keys.
15	T1 (RX) Timer Value	Set the T1 timer for reception. T1 (TX) is a time to detect up to 3 flags of DIS sent from a called fax machine. The time from issue of the first DIS to issue of a signal is checked. If a time-out occurs, the line is disconnected. 1) Setting values 10-255 selectable (in 1 second steps) * Enter a value with ten-keys.
16	T2 Timer *100MS	Set the T2 timer. The T2 timer is an EOL (End Of Line) signal interval timer used for G3 image reception or an instruction reception wait timer. If any signal cannot be detected within the timer-set time, the fax disconnects the line. 1) Setting values 1-255 selectable (in 100 ms steps) * Enter a value with ten-keys. * Actual value = (Set value) x 100 ms Suppose the set value is 060, then 060 x 100 ms = 6 s

Table 2.9.2.3 Technical Functions: Setup (5/12)

No.	Item	Specifications
17	DIS Bit32	Determine whether the thirty-second bit (expansion bit) and the succeeding bit 32 of DIS is to be sent out. 1) Setting values ON (Transmits a bit 32)/OFF (Not transmit) * When OFF is selected, machines of other companies cannot receive documents in the EX.FINE, SEP/SUB mode or JBIG.
18	Error Criterion	Set an image error criterion (RTN sending standard). Sets the threshould value whether to transmit RTN or MCF signa when the error occurs in received data. 1) Setting values 00-99 (%) selectable in (1% steps) * Enter a value with ten-keys.
19	OFF Hook Bypass	Determine whether on-hook is regarded as off-hook. Switches the function of maintaining communication without hooking up the telephone set in normal testing etc. 1) Setting values ON (bypassed)/OFF (Not bypassed)
20	NL Equalizer	Set up the reception amplitude equalizer. 1) Setting values Select one of the following values according to the line length: 0 dB/4 dB/8 dB/12 dB selectable
21	Attenuator	Set the FX signal attenuator (level). Since the maximum send signal power level (dB) of the fax is at 0dB, you can select 0dB to -15dB in one dB steps for the send signal power level. 1) Setting values 0-15 dB (in 1 dB steps) except FRE In case Country Code is changed in FRE: Forcibly, set to 7dB when the attenuator setting values are set between 0dB to 6dB. * Enter a value with ten-keys. *Note:* The send signal power level should meet your country's regurations. Some countries may specify the power level at a relephone exchange. In that case, you should substract the specified level from the line cable attenuation to determin the send level of your fax.

Table 2.9.2.3 Technical Functions: Setup (6/12)

No.	Item	Specifications
22	T/F Tone Attenuator (for TEL/FAX switch)	Set the T/F pseudo ring back tone signal attenuator (level). 1) Setting values 0-15 dB (in 1 dB steps) * Enter a value with ten-keys.
23	MF Attenuator	[Set the MF signal attenuator (level). 1) Setting values 0-15 dB (in 1 dB steps) * Enter a value with ten-keys.
24	Ring Dura. *10MS	Set a ring detection time within the range from 100 ms to 990 ms. 1) Setting values 10-99 (in 10 ms steps) * Enter a value with ten-keys. * Actual value = (Set value) x 10 ms Suppose the set value is 12, then 12 x 10 ms = 120 ms
25	CML Timing *100MS	Set a line seizure timing within the range from 100 ms to 1900 ms. 1) Setting values 1-19 (in 100 ms steps) * Enter a value with ten-keys. * Actual value = (Set value) x 100 ms Suppose the set value is 03, then 03 x 100 ms = 300 ms

Table 2.9.2.3 Technical Functions: Setup (7/12)

No.	Item	Specifications
26	LED Head Strobe	Set the LED head strobe time. The larger the value, the darker the image. 1) Setting values 00000 to 11111 (5 bits) *Note 1:* When the rank marking of the new replaced LED print head (new part) is same as that of the old used LED print head (old part), you do not always have to set the LED print head strobe signal. *Note 2:* Intensity ranking is determined by the first, secondand third digits from the right on the LED print headserial number. (i.e. in ...065, 065 is the intensity ranking.)

Setting of Technical Function No. 26

Setting / Rank Marking	MSB ↑ LSB																													
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1
		0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
		0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
		0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
085											*																				
080-084												*																			
074+079													*																	
070-073														*																
065-069															*															
061-064																*														
058-060																	*													
053-057																		*												
050-052																			*											
047-049																				*										
044-046																					*									
041-043																						*								
038-040																							*							
036-037																								*						
033-035																									*					
031-032																										*				
029-030																											*			
027-028																												*		
-026																													*	

Table 2.9.2.3 Technical Functions: Setup (8/12)

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>27</td><td>Media Type</td><td>Set the recording paper quality (thickness).

1) Setting values
M (Medium)/MH (Thicker than medium)/H (Thick)</td></tr>
<tr><td>28</td><td>TR (transfer roller)
Latch Current</td><td>Set an imprinting latch current value.

1) Setting values
-2/-1/0/+1/+2</td></tr>
<tr><td>29</td><td>V34 TX Retry</td><td>Determine whether the V34 communication error is to be remembered.

1) Setting values
ON (Remembered)/OFF (Nor remembered)</td></tr>
<tr><td>30</td><td>Symbol Ratre</td><td>Set the V.34 modem symbol rate.

1) Setting values
2400/3000/3200/3429</td></tr>
<tr><td>31</td><td>NSF Switch</td><td>Determine whether the NSS/NSF signal is to be sent.

1) Setting values
ON (sent)/OFF (Not sent)

* If data is transmitted with this setting OFF, DCS transmission is performed (NSC is not sent) even if the Oki NSF is received.
* If REMOTE DIAGNOSIS is set to ON although NSF Switch (this setting) is set to OFF, an NSF is sent and sent immediately if Oki’s original function is ON (confidential, etc.).</td></tr>
<tr><td>32</td><td>ID/TSI Priority</td><td>Determines whether the personal ID or TSI is given priority during LCD display and printing.

1) Setting values
ID (Personal ID is given priority)/TSI (TSI is given priority)
<table>
<tr><td rowspan="3">Priority</td><td colspan="2">ID/TSI PRIORITY=ID</td><td colspan="2">ID/TSI PRIORITY=TSI</td></tr>
<tr><td colspan="2">LCD display during communication
Description in Activity report</td><td colspan="2">LCD display during communication
Description in Activity report</td></tr>
<tr><td>TX</td><td>RX</td><td>TX</td><td>RX</td></tr>
<tr><td>1 (High)</td><td>Personal ID</td><td>Personal ID</td><td>CSI</td><td>TSI</td></tr>
<tr><td>2</td><td>CSI</td><td>TSI</td><td>Calling No.</td><td>(Calling No.)</td></tr>
<tr><td>3</td><td>Calling ID</td><td>(Calling ID)</td><td>(Personal ID)</td><td>Personal ID</td></tr>
<tr><td>4 (Low)</td><td>Calling No.</td><td>(Calling No.)</td><td>–</td><td>–</td></tr>
</table>
* Shaded combinations do not exist actually.</td></tr>
</table>

Table 2.9.2.3 Technical Functions: Setup (9/12)

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>33</td><td>Toner Count Clear</td><td>Determine whether the toner counter can be cleared regardless of the service bit setting (ON/OFF).

1) Setting values
ON (Can be cleared)/OFF (Cannot be cleared)
<table>
<tr><th rowspan="3">Display clear
Various counters</th><th colspan="2">Counter display</th><th colspan="2">Counter clear</th><th rowspan="3">Remarks</th></tr>
<tr><th colspan="2">Service bit</th><th colspan="2">Service bit</th></tr>
<tr><th>OFF</th><th>ON</th><th>OFF</th><th>ON</th></tr>
<tr><td>Drum</td><td>×</td><td>○</td><td>○</td><td>○</td><td>Can be replaced by user</td></tr>
<tr><td>Toner</td><td>×</td><td>○</td><td>This function is set to ON: ○ OFF: ×</td><td>○</td><td>Can be replaced by user</td></tr>
<tr><td>Drum total</td><td>×</td><td>○</td><td>×</td><td>○</td><td></td></tr>
<tr><td>Print</td><td>○</td><td>○</td><td>×</td><td>○</td><td></td></tr>
<tr><td>Scan</td><td>○</td><td>○</td><td>×</td><td>○</td><td></td></tr>
</table></td></tr>
<tr><td>34</td><td>Parallel Pick Up</td><td>Determine whether parallel pickup is enabled.

To control a receiving fax by 2 digits (the same digits as remote reception) from a telephone set connected parallel to the telephone line.

1) Setting values
ON (Enabled)/OFF (Disabled)</td></tr>
<tr><td>35</td><td>Print Priority</td><td>Determine whether the memory is mainly used for printing. This setting is required to rescue the image data that cannot be stored in the page memory if ACC compression is carried out during PC/LAN printing.

1) Setting values
Relationships between settings and page memory capacities are as follows:
ON (2560 KB)/OFF (1844 KB)

This setting becomes effective by restarting the equipment (turning off the equipment at first and then turning on the equipment) after the setting change.</td></tr>
<tr><td>36</td><td>RELAY BROADCAST</td><td>Sets up whether to make relay broadcast.
1) Setting value
ON (Make relay broadcast) / OFF (Make no relay broadcast)
* Opening relay broadcast box disabled when this setting is OFF.
* In the case of FX-056VP, setting is skipped. (Only FX-176VPoperable)</td></tr>
</table>

Table 2.9.2.3 Technical Functions: Setup (10/12)

No.	Item	Specifications
37	FAX2NET FUNCTION	Sets up whether to make FAX2NET related operation. 1) Setting value ON: FAX2NET related operation is allowed. OFF: All FAX2NET setting and operation cannot be displayed and printed. * When FAX2NET communication is the wait state, change of setting is inhibited.(FUNC NOT AVAIL.)
38	JBIG Facility	Set up the encoding JIG. 1) Setting values In case of FX-056VP, setting is skipped. (Only FX-176VP operatable)
39	LLC Check	Determine whether the lower layer compatibility information instracted from the calling side is analyzed. 1) Setting values ON (Analyzed)/OFF (Not analyzed) * The setting data must be transferred to the ISDN board. * Cannot be selected when ISDN option board is not installed.
40	G3/G4 LEARNING	Sets up whether to learn G3/G4 communication. 1) Setting value ON (Learn) / OFF (Not learn) * Setting disabled if without ISDN option.
41	G3 SETUP BC	Set the SETUP command value when G3-Fax is used in the ISDN line. 1) Setting value 3.1 KHz/SPEECH * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.

Table 2.9.2.3 Technical Functions: Setup (11/12)

No.	Item	Specifications
42	G3 RETRY SETUP	Sets whether the G3 SETUP is expanded or not. 1) Setting Values ON (retry) / OFF (no retry) ON: In the G3 DIAL operation, performs DIAL as shown in the table below. If the dialing fails, DIAL will be repeated while switching the SETUP contents. After the DIAL operation fails 9 times, the machine goes to the REDIAL WAIT state. OFF: In the G3 DIAL operation, performs DIAL according to the SETUP contents. If the dialing fails, the machine goes to the REDIAL WAIT state. * Without ISDN options, this setting is not available. * Data transmission to the G4 Board is required, when this setting is changed. * The G3 DIAL operation is performed as specified in the tables below, depending on ON/OFF setting.

When ON

G3 Dial time	Contents of SETUP		
	BC Bearer capability	HLC High layer compatibility	LLC Low layer compatibility
1st G3 Dial	According to G3 SETUP BC setting SPEC : Speech 3.1K : 3.1kHz	According to SPEECH RECEIVE setting ON : Not use OFF : G3	According to LLC CHECK setting ON : 3.1kHz OFF : Not use
2nd G3 Dial	Speech	Not use	Not use
3rd G3 Dial	Speech	G3	Not use
4th G3 Dial	Speech	Not use	Speech
5th G3 Dial	Speech	G3	Speech
6th G3 Dial	3.1kHz	Not use	Not use
7th G3 Dial	3.1kHz	G3	Not use
8th G3 Dial	3.1kHz	Not use	3.1kHz
9th G3 Dial	3.1kHz	G3	3.1kHz

When OFF

	Contents of SETUP		
	BC Bearer capability	HLC High layer compatibility	LLC Low layer compatibility
G3 Dial	According to G3 SETUP BC setting	According to SPEECH RECEIVE setting	According to LLC CHECK setting

Table 2.9.2.3 Technical Functions: Setup (12/12)

No.	Item	Specifications
43	GATEWAY SERVICE	Sets up whether to make relay service for Email and public line. 1) Setting value ON (Relay) / OFF (Not relay) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
44	EMAIL MAINTENANCE	Sets up whether to validate maintenance function using Email. 1) Setting value ON (Validate) / OFF (Invalidate) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
45	ADMIN EMAIL ADDR.	Registers Email address of FAX administrator. To be used for the address when FAX sends any information to the administrator via Email. 1) Email Address of administrator registration number of digits 64 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
46	COMMAND T.O.	Sets the timeout value in SMTP and POP3 protocols. 1) Setting value 5 sec/30 sec/5 min * This setting is stored in NIC. (Data transfer to NIC required for changing the content of the setting.) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed. * This setting operation cannot be selected when HSP error or initializing NIC even if LAN option is present. (FUNC NOT AVAIL.)

2.9.2.4 TEL/FAX automatic switching

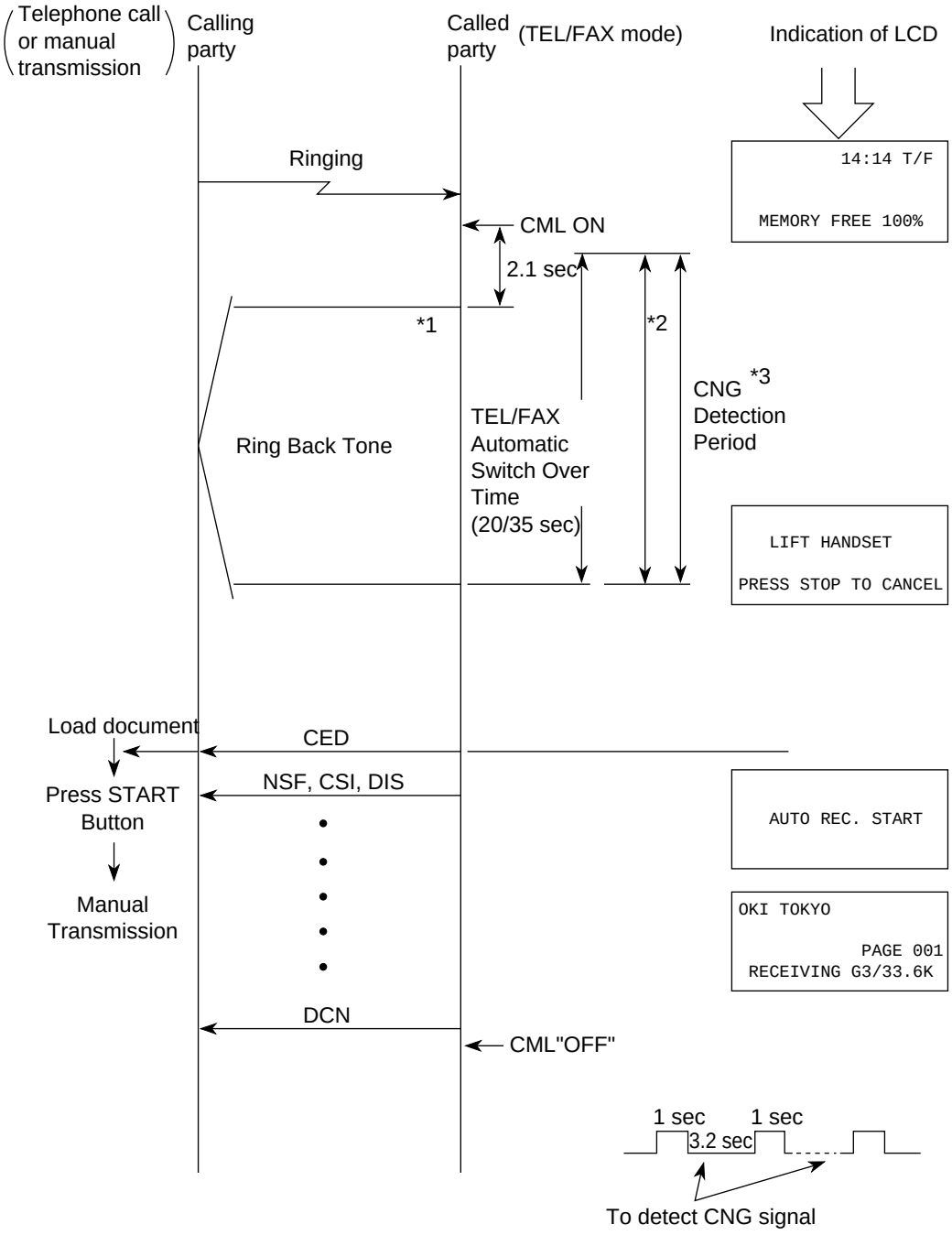
This function is used for the purpose of TEL/FAX automatic switching as follows.

1) If the machine detects a call with a CNG signal indicating an auto send facsimile call, it starts an automatic document receiving operation.
2) If machine detects a call without a CNG signal, machine generates the buzzer sounds as a telephone call. The calling person can hear a “ring back” tone within a predetermined time.

If the operator at the called side does not lift the handset within the predetermined time, the machine automatically starts a document receiving operation.
Voice conversion will automatically be available through the internal handset by lifting up handset while the call buzzer is sounding.

Note: 1. The predetermined time is selectable between 20 or 35 sec.
(User Functions: Incoming option No.62)
2. No ringing signal is sent to the external telephone handset.
3. Choice of message sending level. The level is selectable from 0 to 15 dB in one dB steps.
Technical Functione: Setup No.22)
4. TEL/FAX mode is available by Technical Function (Setup No.08).

• TEL/FAX mode flow chart



Notes **1: Ring Back Tone — 1 sec. ON, 3.2 sec. OFF*
**2: When you want to talk by phone, pick up handset.*
**3: The called party can send CED to the calling party immediately to start FAX communication if the CNG is detected during the period.*
**4: If the fax does not detect CNG signal during working of TEL/FAX mode, LCD display indicates "LIFT HANDSET".*

2.9.2.5 TAD mode

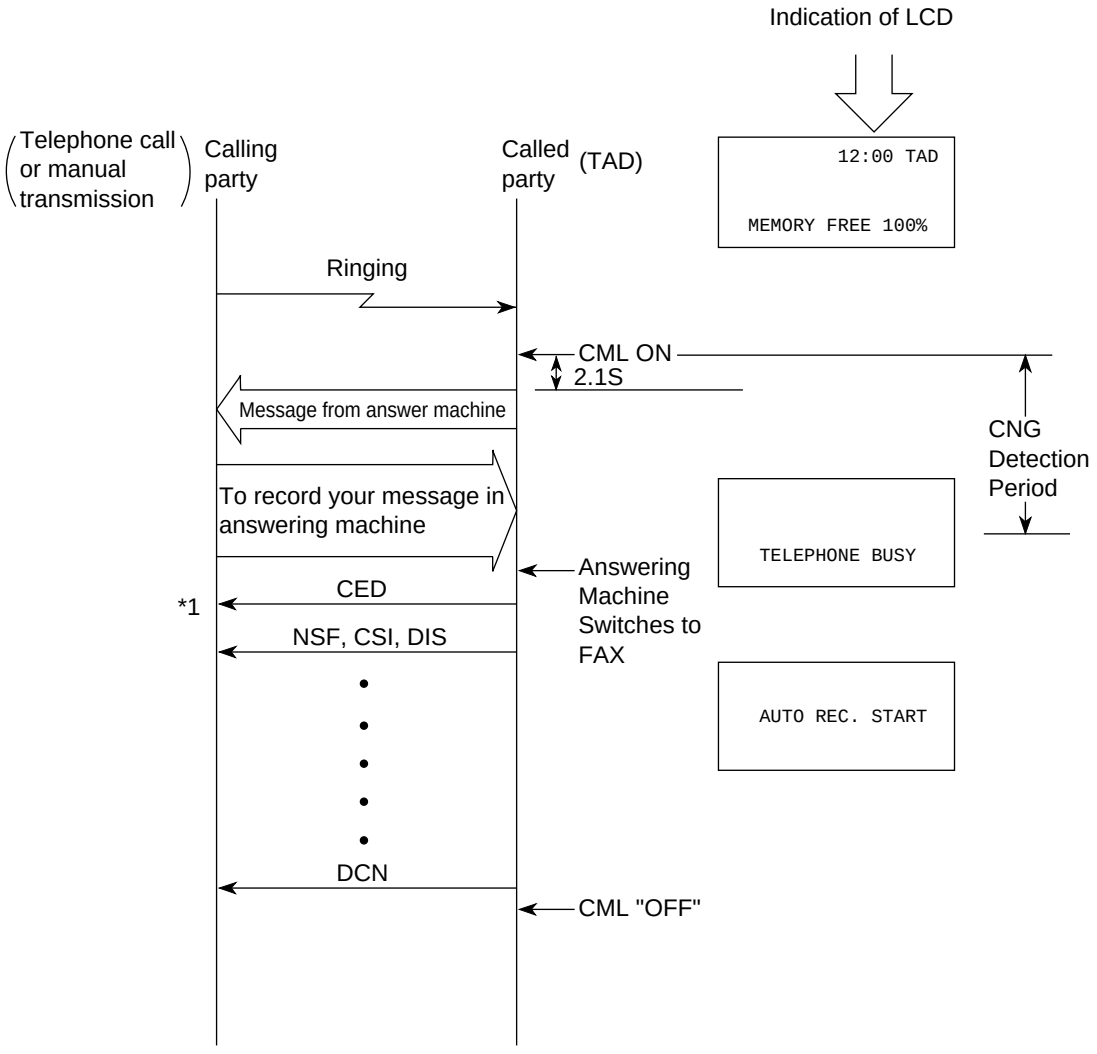
- TAD: Telephone Answering Device
- TAD can be connected to extenal telephone terminal to record your messages.
- TAD records your speech and switches an automatic voice message response to the calling station.

Note1: A choice of TAD mode is available by technical Function (Setup No.06).
Note2: The predetermined time is selectable between 20 or 35 sec.

- TAD mode flow chart

In case of TYPE 1;

Even though the fax does not detect CNG signal, the fax will go to receiving mode.



*1 To enable the manual TX mode.
Load document → Press START button → Manual transmission

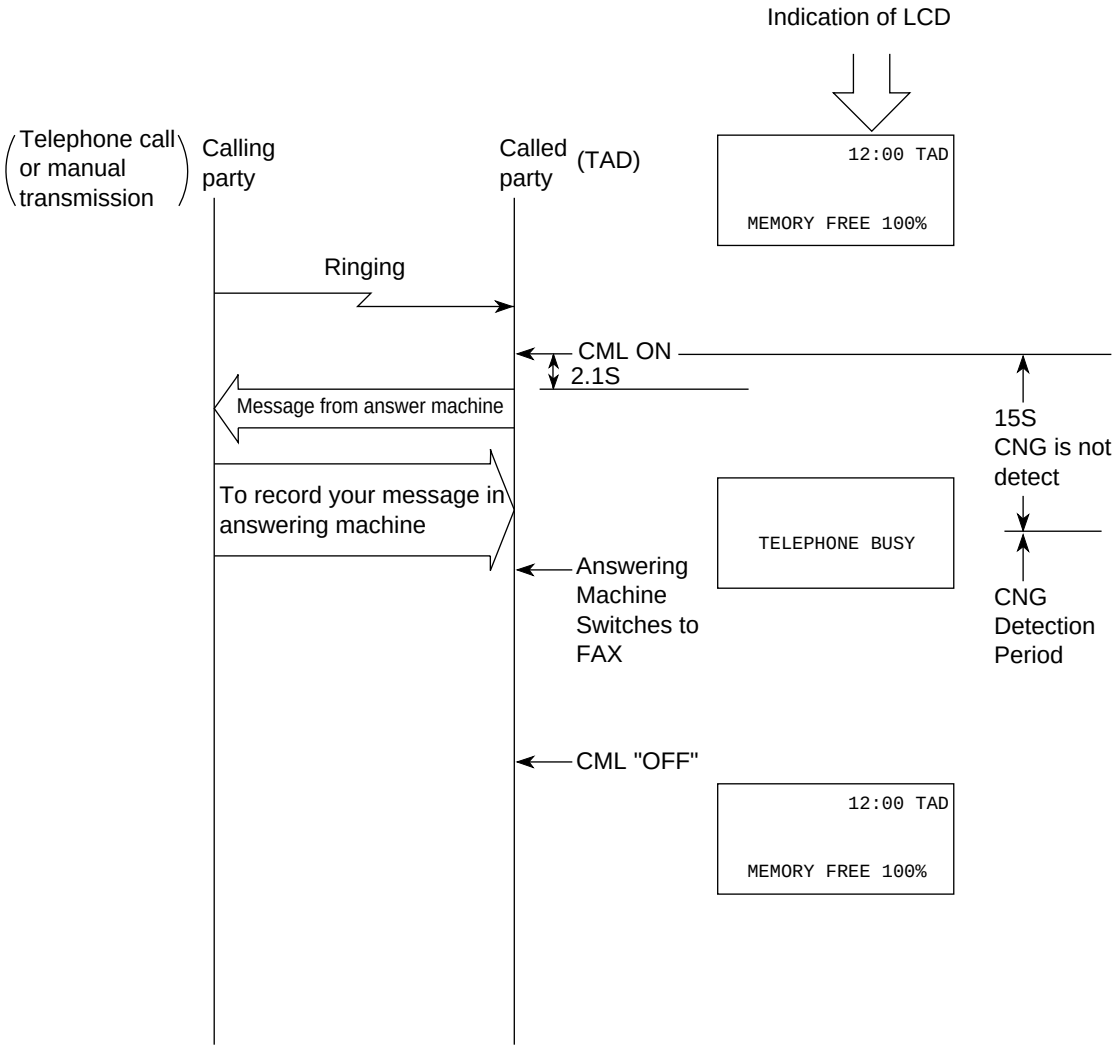
• TAD mode flow chart

1) In case of TYPE2:

   If the fax does not CNG signal during working of TAD, the fax will go to standby state.

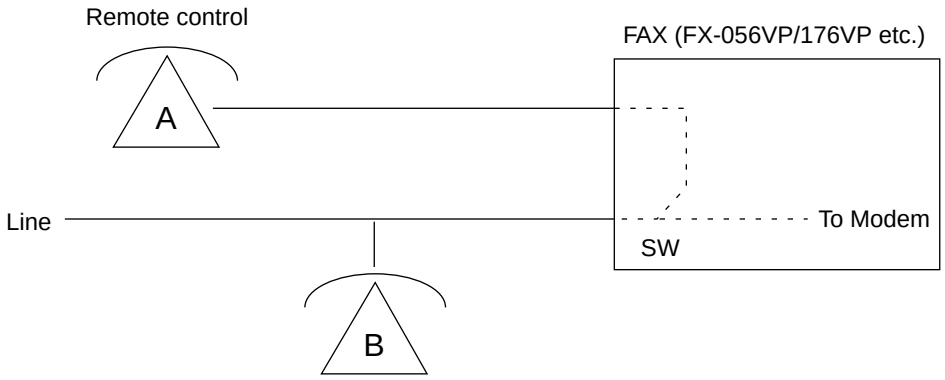
2) In case of TYPE 3:

   The fax does not detect CNG signal during 15 seconds from TAD operation starting. The fax starts CNG signal detection after 15 seconds from TAD operation.
   When the fax does not detect CNG signal and ends TAD operation (on-hook of TAD operation), the fax return to standby state.



2.9.2.6 Outline of Parallel Pick Up

Parallel pick up is a function that controls a fax (to make a fax in receive mode) from a telephone set connected parallel to a fax. The two possible parallel connections of telephone sets A and B are shown in the figure.

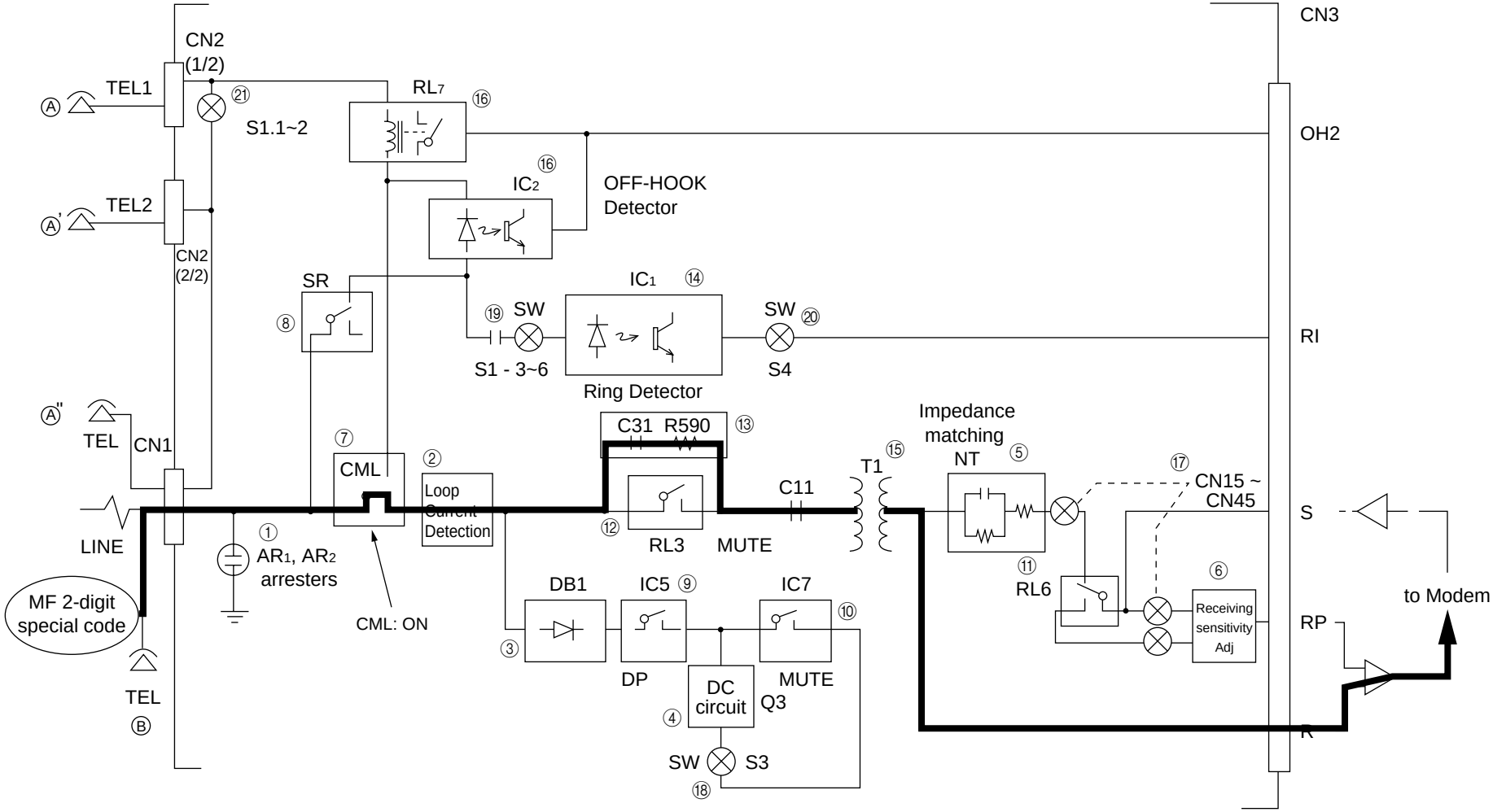


Remote control: To control a fax from telephone set A
Parallel Pick Up (PP): To control a fax from telephone set B.

• Why a PP function is needed !
As shown in the block diagram on the next page, telephone sets B, A, A' and A" are connected to a telephone line.
Since A, A' and A" are connected to the line via fax, off-hook status of any of the telephone sets can be detected by the OFF-HOOK Detector 16 in the block diagram.
However, off-hook status of telephone set B cannot be detected by the fax side.

• PP Control
When a normal ring arrives at the fax from the line, the CML 7 turns on resulting in the formation of an AC loop via circuit 13. The AC loop makes it possible for the modem to detect the AC signals. If a user hooks up telephone set B after the first ring and enters the MF 2-digit special code in order to make the fax in the receive mode, then it becomes possible to detect the MF signals along the remote.

Block Diagram



2.9.3 User's Functions

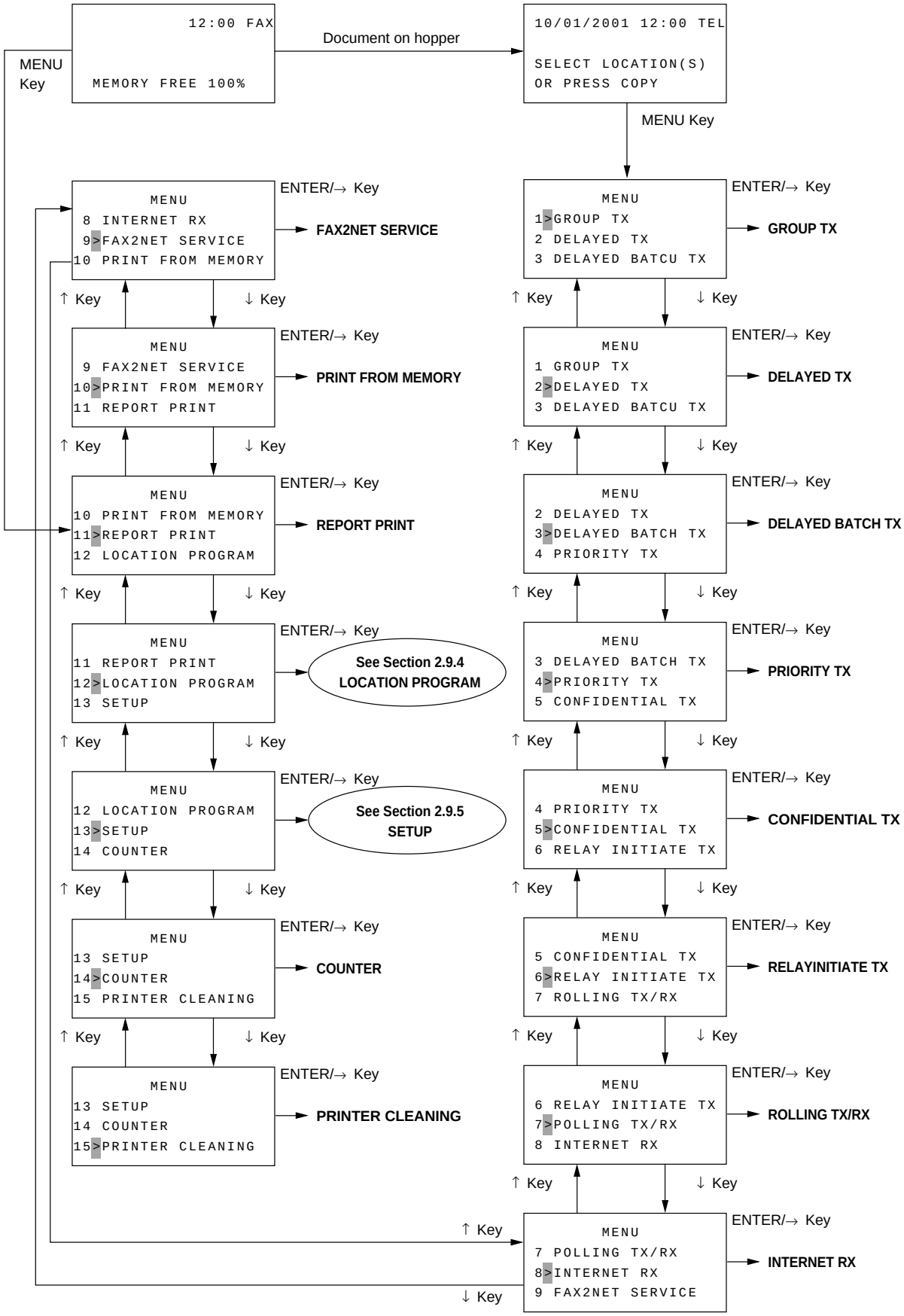
This section explains the items usually set up by general users.

• Select Menu is shown as below:

1. Group TX
2. Delayed TX
3. Delayed Batch TX
4. Priotity TX
5. Confidential TX
6. Relayinitiate TX
7. Polling TX/RX
8. Internet RX
9. Fax2Net Service
10. Print From Memory
11. Report Print
12. Location Program: Go to Section 2.9.4
13. Setup: Go to Section 2.9.5
14. Counter
15. Printer Cleaning

Menu selection

Given below are the sections to refer to when selecting user functions.



2.9.4 Location Program

1) The machine is standby state with no document.
2) Press the MENUEXIT key once.
3) Press the SHIFT DOWN (↓) key two times.
4) The menu option “12 LOCATION PROGRAM” indicated by the blinking cursor is selected, and press the ENTER/SHIFT RIGHT (→) key.
5) The display will be shown “LOCATION PROGRAM” and you can access a desired function by switching among menus using SHIFT keys (↑, ↓), and press the ENTER/ SHIFT RIGHT (→) key.

2.9.4.1 Select Menu is shown as below:

1. Speed Dial
2. Group
3. Batch TX Time
4. Forwarding No.
5. Forward ON P-ERR
6. Relay Report No.
7. FAX Network PRG.

See Table 2.9.4.1 Location program for the detail.

Location Program

* For operation and registration, see FX-056VP/176VPHandbook.

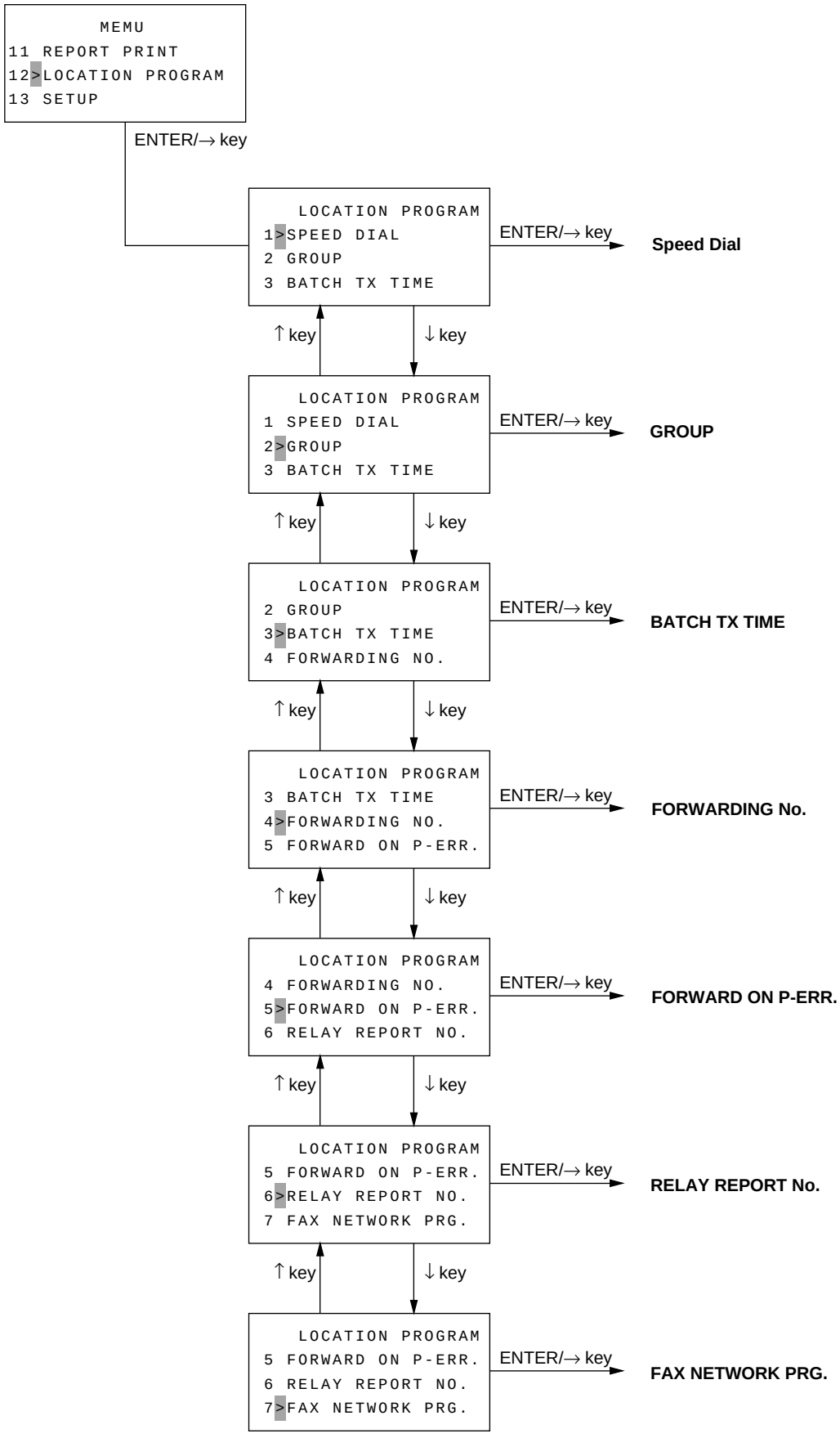


Table 2.9.4.1 Location Program (1/6)

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>1</td><td>Speed Dial</td><td>
Register speed dial number.
In one of the speed dial, TEL NO./EMAIL ADDRESS/WEB URL can be registered exclusively any one. However, EMAIL ADDRESS and WEB URL can be registered only in the speed dial (1-40) assigned in One-touch key.

• Number of speed dials
FX-056VP: 1-140 (1-40 are assigned to ONE TOUCH keys.)
FX-176VP: 1-230 (1-80 are assigned to ONE TOUCH keys.)

* The number of Speed Dial of FX-056VP mentioned above is only in case when the Country Code = USA, and also PnP = ODA, USA-Konica (PLUG & PLAY ID = 00,05) Otherwise the number is 1~190.

1) TEL NO. Registration
Registered LOC#/NAME/ALT#/Communication parameters.
* Only LOC# may be registered.
(If NAME is omitted, location serch will not be made.)
* If a telephone number is doubly registered in a one-touch key in which an EMAIL or WEB address is already registered, the EMAIL or WEB address is deleted.
* This will be the object of collation of the closed network service.

• Number of characters that can be entered (all speed dials)
NAME=15 characters (ten-keys 0-9/*/#/alphbetic characters (uppercase and lowercase characters)/special characters/ PAUSE/HYPHEN/SPACE/+)
LOC# and ALT#=40 characters each (ten-keys 0-9/*/#/ PAUSE/SPACE/+)
* ALT# can be registered only in speed dial assigned in One-touch key.

• Communication parameter
- Communication speeds (33.6/28.8/14.4/9.6/4.8K)
- Echo protection (ON/OFF)
The settings shown below depend on the ON/OFF setting. When OT is transmitted, the “Tone for Echo” setting is ignored and the settings made here are used for the transmission.
<table>
<tr><td>ECHO PROTECTION</td><td>OFF</td><td>ON</td></tr>
<tr><td>Protective Tone</td><td>OFF</td><td>ON</td></tr>
<tr><td>Ignore 1st DIS</td><td>OFF</td><td>ON</td></tr>
</table>
• ISDN Dial Mode (G3 MODE/G4 MODE)
- Switching between G3 MODE and G4 MODE

G4 MODE: Request the network unlimited digital transfer for transmitting in G4 mode when calling with Speed Dial.
G3 MODE: Requests the network 3.1 kHz audio transfer to transmit in G3 mode when calling with Speed Dial.
</td></tr>
</table>

Table 2.9.4.1 Location Program (2/6)

No.	Item	Specifications
		2) EMAIL ADDRESS REGISTRATION Registers an EMAIL address. • Input number of digit (FX-056VP: 1~50 / FX-176VP: 1~90) EMAIL ADDRESS = 64 digits * Input enabled characters Numerical: 0 - 9 Alphabetical character: A - Z, a - z Symbol: ! # & ' ( ) * + , - . / : ; = ? @ \ " _ % _ * Entry of Norwegian and umlaut characters are disabled. * Symbol entry by ten-key pad or unique key is enabled. "~" (tilde) is displayed as "-1" (power of -1) * CAPS is OFF by default (CAPS OFF DISPLAY) * If calling address is specified, EMAIL ADDRESS too will be the object of the address search. * If EMAIL ADDRESS is registered to OT to which TEL. NO. or WEB URL is already registered, the TEL.NO. or WEB URL will be deleted. * When FAX2NET FUNCTION = ON and also ACCOUNT NO. has registered, or when NIC TYPE2 is installed, then EMAIL ADDRESS can be registered. - Transmission Parameter (When NIC TYPE2 is installed, the setting here is available.) - SEND FILE FORMAT (TIFF / PDF) This setting is to decide which of PDF / TIFF will be used for sending manuscripts. - SENDER ID (EMAIL) (ON / OFF) This setting is to decide if SENDER ID will be added when T.37 is sent. - RETURN RECEIPT (ON / OFF) This setting is to decide if the Return Receipt Confirmation (MDN) will be done or not. 3) WEB URL REGISTRATION Registers WEB URL. • Input number of digit (FX-056VP: 1~50 / FX-176VP: 1~90) WEB URL = 64 digits (Entry enabled characters are same as EMAIL ADDRESS.) * "http://" is displayed in advance (users need not enter) "http://" is not included in the number of input digits. * CAPS will be OFF by default. (CAPS OFF DISPLAY) * If calling address is specified, WEB URL is not included in the object of address research. (Search enabled only when WEB RETRIEVAL) * If WEB URL is registered to OT to which TEL.NO or EMAIL ADDRESS is already registered, the TEL.NO. or EMAIL ADDRESS will be deleted.

Table 2.9.4.1 Location Program (3/6)

No.	Item	Specifications
		* When the FAX2NET FUNCTION = ON and also when the Account No. is registered, then the registration of WEB URL is available. * In case when SPEED DIAL is registered in Groups or the Relay Box , then it is impossible to change into the WEB URL. (“INVALID OPERATION” will be displayed.) Changing into TEL and EMAIL is available. (TEL / EMAIL can be registered there mixed together.)
2	Group	Register group dials. (Only the speed dials to which a location address is assigned can be registered.) 1) Number of group dials that can be registered FX-056VP: 20 groups (1 group: 1-140 locations) FX-176VP: 20 groups (1 group: 1-230 locations) * The number of the locations of FX-056VP mentioned above is in case when Country Code = USA and also PnP = ODA, USA-Konica (PLUG&PLAY ID = 00,05). Otherwise it is 1~190. 2) Number of group dial IDs that can be registered 15 characters (ten-keys 0-9/*/#/alphabetic characters (upper-case and lowercase characters)/special characters/PAUSE/ HYPHEN/SPACE/+) * The Speed Dials that are registering Email Addresses can be registered in the group. Although, if either of the following conditions is met, the registration is not available. When NIC TYPE2 is not installed, and also FAX2NET FUNDTION = OFF. When NIC TYPE2 is not installed, and also ACCOUNT NO. is not registered. Tel. No.(s) and Email Addresses can be registered mixed together. * The Speed Dial(s) that are registering WEB URL can not be registered in the Group.(“INVALID OPERATION”) * When Speed Dials that are registering Email Addresses are registered in the Group, if the Account No. is eliminated and also NIC TYPE2 is not installed, then only the Emails from the group are eliminated. If all the registered locations are Email Addresses then the whole group will be eliminated.

Table 2.9.4.1 Location Program (4/6)

No.	Item	Specifications
3	Batch TX time	Set a batch transmission time (24-hour system). When a time is specified, locations can be specified during batch transmission operation. 1) Number of batch TX times that can be registered FX-056VP/176VP: 10 (Speed dial numbers 31-40 are assigned.) * Registration is enabled if the specified speed dial is not registered in the remote machine. 2) Specifiable time range 00:00 to 23:59 (Date cannot be specified.)
4	Forwarding No.	This setting is to designate locations of Receiving Forwarding If NIC TYPE2 is installed or there is registered Account No., then Email Address can be registered. After it is set, the FWD selection by AUTO ANSWER MODE is enable. 1) Registered Number of Forwarding No. FX-056VP/176VP : 1 (The registration of Tel No.(s) and Email Addresses is available exclusively.) 2) Digit number of locations entering TEL. NO.: 40 digits Numeric keypad(0~9)/*/#/PAUSE/SPACE/+ * This will become the object of closed communication service. EMAIL ADDRESS: 64 digits Available characters to enter are the same to the EMAIL ADDRESS of SD. * When Mail Addresses are registered in Forwarding No.(s), and if the Account No. is eliminated, and also NIC TYPE2 is OFF, then FORWARDING NO. should be clicked when it is eliminated. And if AUTO ANSWER MODE = “FWD” at that time, then change it into “FAX”. * When Mail Addresses are registered in Forwarding No.(s), and the Account No. is eliminated, if NIC TYPE2 is not installed, then FORWARDING NO. should be clicked when it is eliminated. And if AUTO ANSWER MODE = “FWD” at that time, then change it into “FAX”.

Table 2.9.4.1 Location Program (5/6)

No.	Item	Specifications
5	Forwarding On P-ERR.	Designate Locations of Proxy Forwarding If NIC TYPE2 is installed or there is registered Account No., then Email Address can be registered. After it is set, in case of the proxy receiving because of no sheet available for instance, then the forwarding will be done to the designated location. 1) Registered Number of Forward On P-ERR. FX-056VP/176VP : 1 (The registration of Tel No.(s) and Email Addresses is available exclusively.) 2) Digit number of entering locations TEL. NO.: 40 digits Numeric keypad(0~9)/*/#/PAUSE/SPACE/+ * This will become the object of closed communication service. EMAIL ADDRESS: 64 digits Available characters to enter are the same to the EMAIL ADDRESS of SD. * When Mail Addresses are registered in Forwarding No.(s), and the Account No. is eliminated, if NIC TYPE2 is OFF, then FORWARDING NO. should be clicked when it is eliminated. * When Mail Addresses are registered in FORWARD ON P-ERR., and the Account No. is eliminated, if NIC TYPE2 is not installed, then FORWARDING NO. should be clicked when it is eliminated.
6	Relay Report No.	Specify the destination of a relay report for relay broadcast initiate transmission. When this destination is specified, a relay report is transmitted to the specified destination upon the relay broadcast initiate transmission. 1) Number of characters used to specify a destination 40 characters (ten-keys 0-9/*/#/PAUSE/SPACE/+)

Table 2.9.4.1 Location Program (6/6)

No.	Item	Specifications
7	FAX NETWORK PRG.	Make settings concerning FAX2NET service. 1) Set values This setting consists of the following three settings: • SERVER NO. Telephone number of FAX2NET server to be used. When setting PBX, it is necessary to register a number including the Dial Prefix for switching PBX to PTT. * This will be the object of collation of closed communication service. 40 digits (Numerals (0 to 9)/*/#/PAUSE/SPACE/+) • ACCOUNT NO. ID proper to a terminal registered to FAX2NET service 16 digits (Numerals (0 to 9) only • PREFIX NO. A number for making judgement on the start of FAX2NET service (FAX over IP); (3 types) FAX2NET server is called when the leading portion of the opposite party's telephone number coincides with the registered number. When setting Dial Prefix, the number following the dial prefix (and subsequent blank/pause/+).will be compared. 10 digits (Numerals (0 to 9) only) * When the location list waiting for communication is including FAX2NET waiting, then the change of settings will be inhibited. (INVALID OPERATION) * SERVICE TEL NO. / ACCOUNT NO. are both necessary to be registered. If either one of them is cleared, then the other one will be cleared, too. And also, when it is cleared, if SPEED DIAL(s) of Email Location(s) have already registered and also if there are no NIC TYPE2 installed (in other words, when Emails are impossible to be sent), only Email Locations should be eliminated from the GROUP / RELAY BOX. And also, if all the registered locations are Email Locations then the whole GROUP / RELAY BOX should be eliminated. * When MAIL ADDRESS(es) are registered in the FORWARDING NO., and if the ACCOUNT NO. is eliminated when NIC TYPE2 is not installed, then FORWARDING NO. should be clicked. At that time, if AUTO ANSWER MODE is "FWD", it will be changed to "FAX". * When MAIL ADDRESS(es) are registered in the FORWARD ON P-ERR., and if the ACCOUNT NO. is eliminated when NIC TYPE2 is not installed, then FORWARD ON P- ERR. should be clicked. * If the settings of FAX2NET FUNCTION is turned OFF then the setting here is disabled (No displays). At that time, the SERVER NO. and ACCOUNT NO. that are already registered will be eliminated. The PREFIX NO. will be retained.

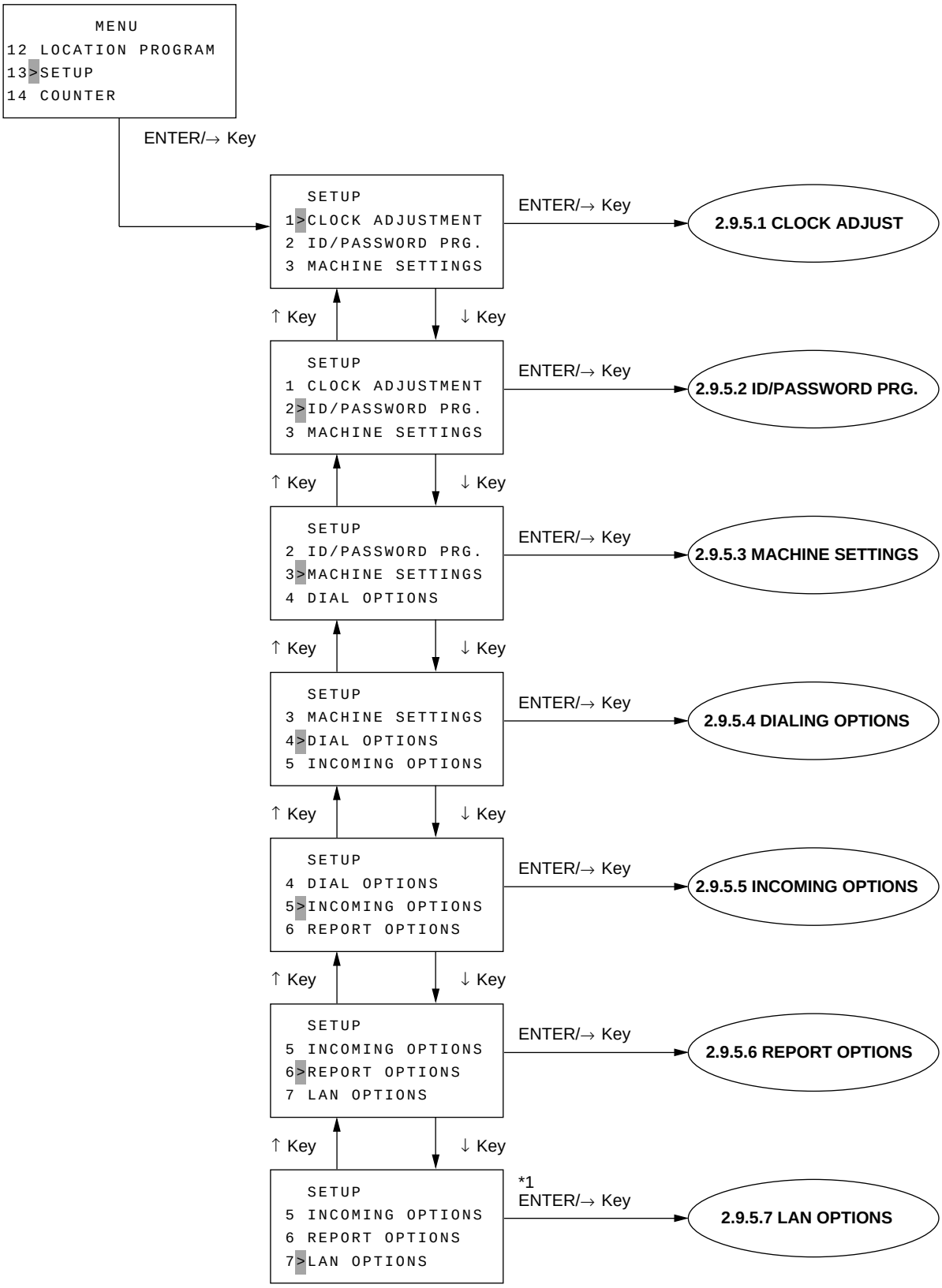
2.9.5 Setup

1) The machine is standby state with no document.
2) Press the MENU key once.
3) Press the SHIFT DOWN (↓) key three times.
4) The menu option “13 SETUP” indicated by the blinking cursor is selected, and press the ENTER/SHIFT RIGHT (→) key.
5) The display will be shown “SETUP” and you can access a desired function by switching among menus using SHIFT keys (↑, ↓), and press the ENTER/SHIFT RIGHT (→) key.

(1) Select Menu is shown as below:

Note: There are two methods for accessing a desired function: Step access and Speed access (direct access).
Speed access number must be entered with two digits.

1. Clock Adjustment (No. 00)
2. I/D Password Programming (No. 01 to 08)
3. Machine Settings (No. 10 to 33)
4. Dialing Options (No. 40 to 52)
5. Incoming Options (No. 60 to 67)
6. Report Options (No. 70 to 73)
7. LAN Options (No. 80 to 97)



*1) Can shift only when LAN option is installed. (The selection item of LAN options changes depending on the NIC TYPE.)
"FUNC.NOT AVAIL" is indicated during 3 seconds by pressing ENTER/→ key in case of MUPIS I/F error or during NIC Initialization.

2.9.5.1 Clock Adjustment

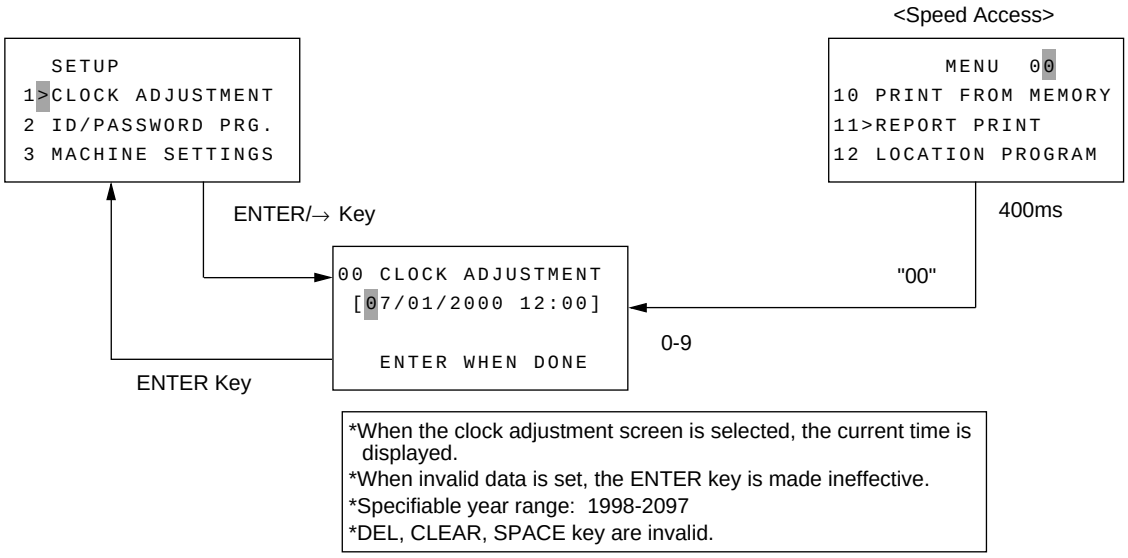


Table 2.9.5.1 Clock Adjustment

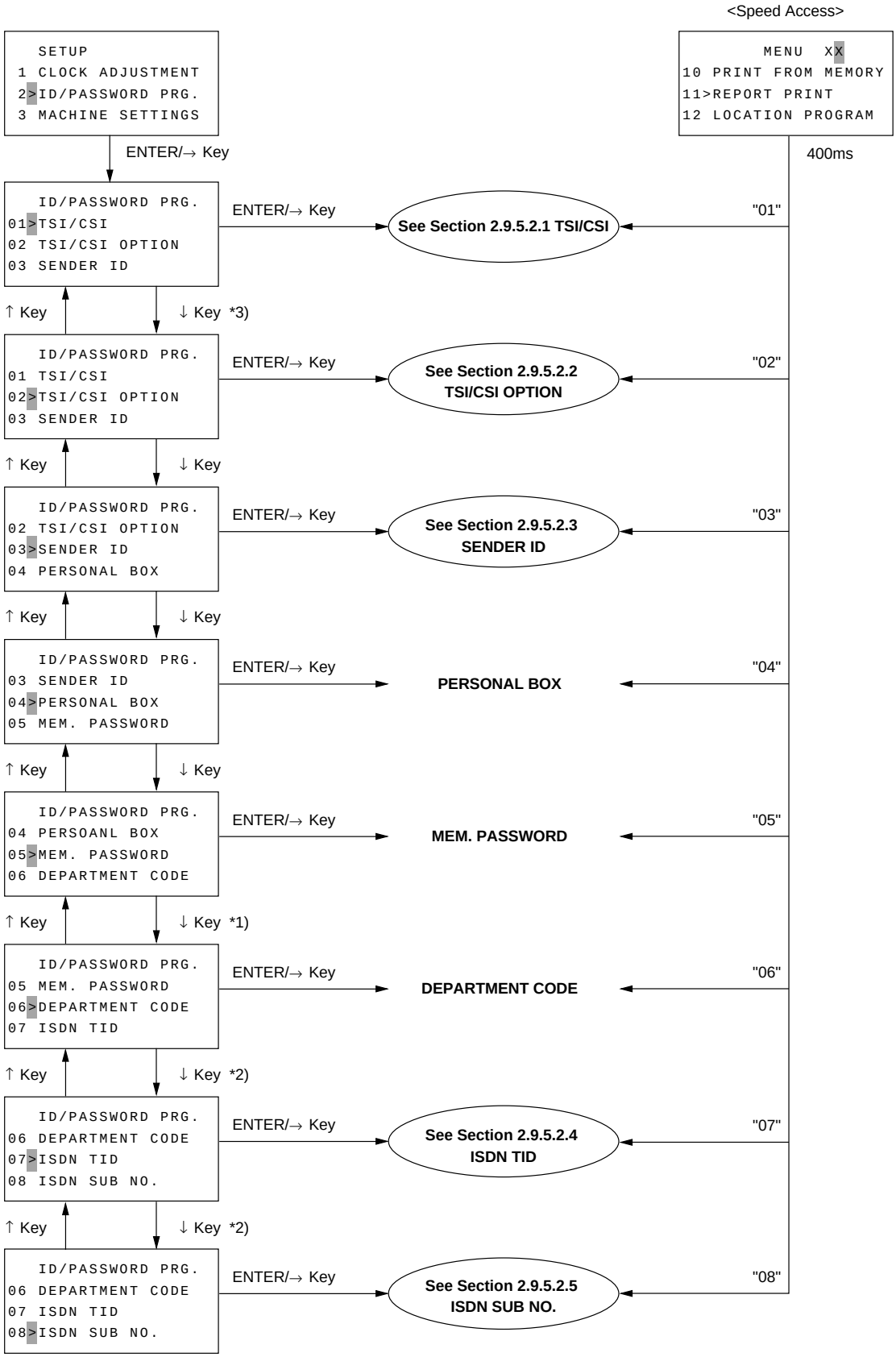
No.	Item	Specifications
00	Clock adjustment	Set the date (year, month, and day) and time. Select either MDY (month/day/year) or DMY (day/month/year). 1) Setting values Year: 1996-2095 Month: 1-12 Day: 1-31 (vary with years and months) Time: 00:00 to 23:59 * When the clock adjustment screen is selected, the current time is displayed. * When invalid data is set, the ENTER key is made ineffective.

2.9.5.2 ID/Password Programming:

The kinds of data programming are:

01: TSI/CSI
02: TSI/CSI Option
03: Sender ID
04: Personal Box
05: Mem. Password
06: Department Code
07: ISDN TID (Country Code/ISDN No./ISDN ID)
08: ISDN Sub No.

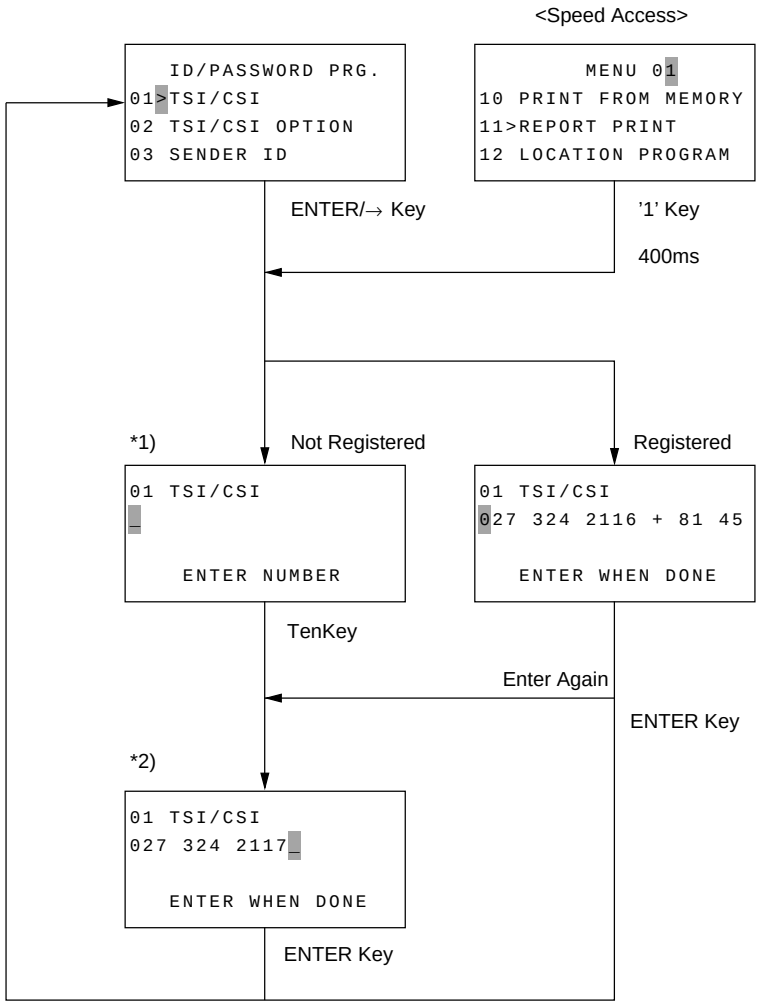
* For operation and registration, see FX-056VP/176VP Handbook.



*1) Can shift only when DEPARTMENT CODE is set to ON.
*2) Can shift only when ISDN option is installed. "FUNC. NOT AVAIL." is indicated during 3 seconds by pressing ENTER/→ Key in case of MUPIS I/F error.
*3) Can shift only when G3 option is installed. "FUNC. NO AVAIL." is indicated during 3 seconds by pressing ENTER/→ Key in case of MUPIS I/F error.

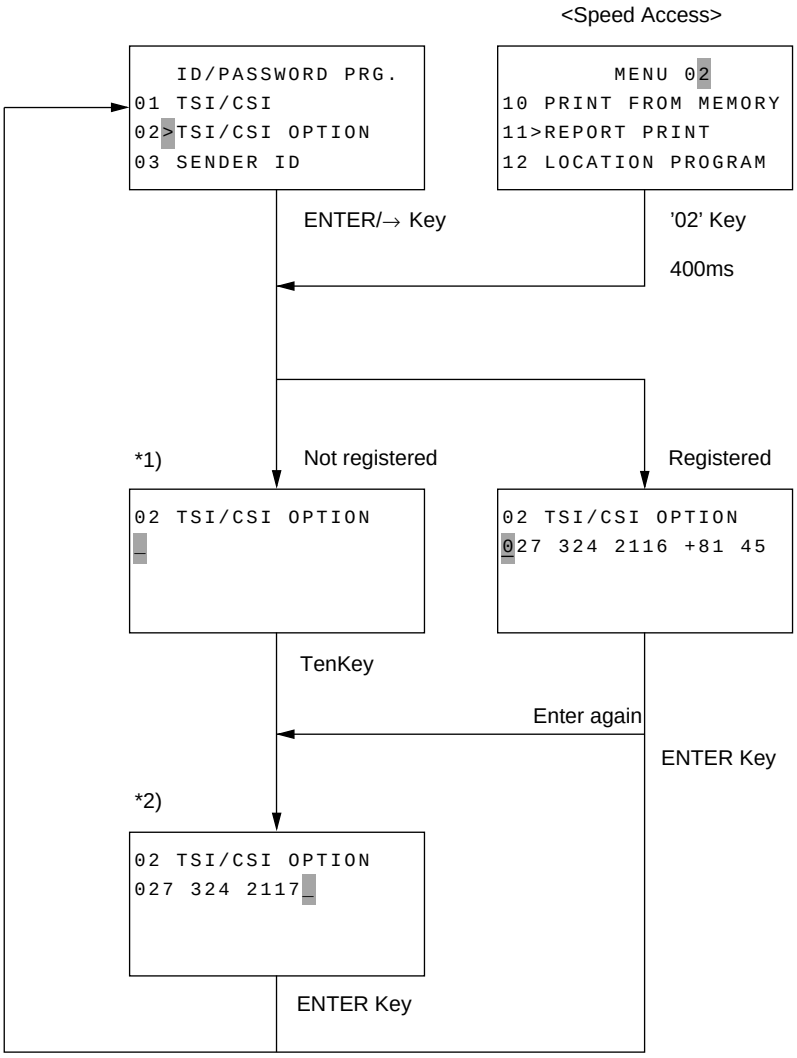
2.9.5.2.1 TSI/CSI

This function is used to register the TSI/CSI.



*1:After the first digit is entered, ENTER WHEN DONE is displayed. It will not change if all characters are erased by pressing the CLEAR key.
*2:Enter the TSI/CSI with a maximum of 20 characters (numerical characters, +, and space).

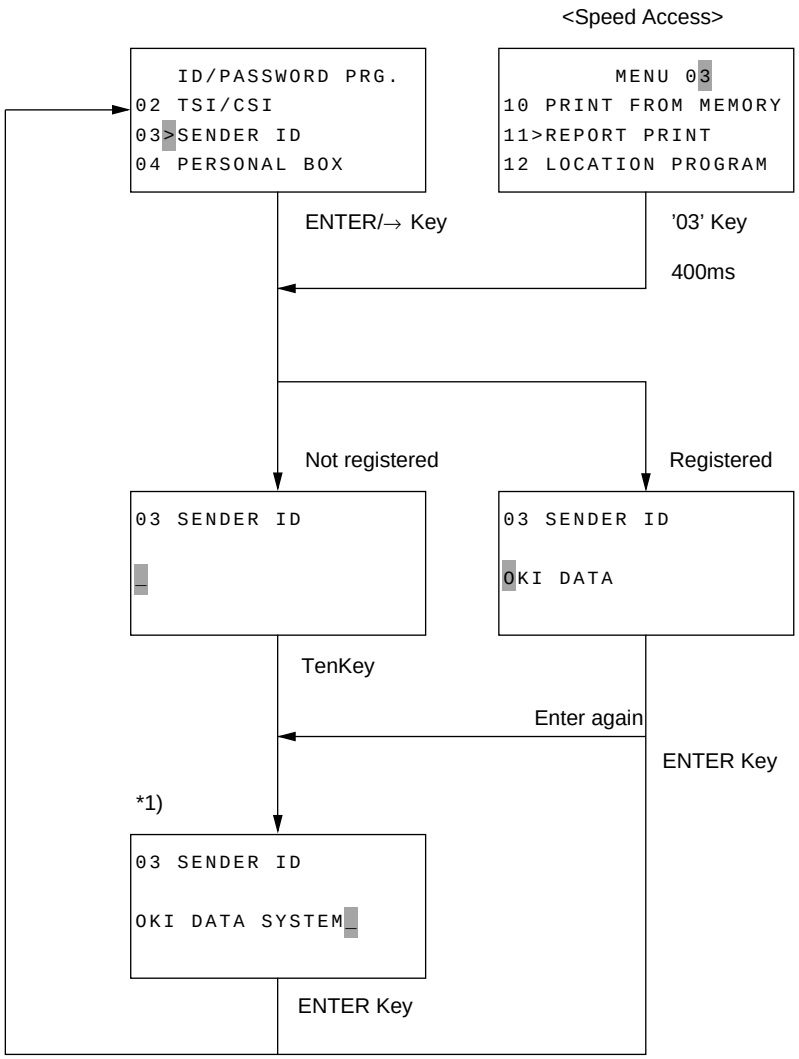
2.9.5.2.2 TSI/CSI Option



*1) After the first digit is entered, "ENTER WHEN DONE" is displayed. It will not change if all characters are erased by pressing the CLEAR key.
*2) Enter the TSI/CSI OPTION with a maximum 20 characters (numerical characters, + and space).

2.9.5.2.3 Sender ID

This function is used to register a sender ID.

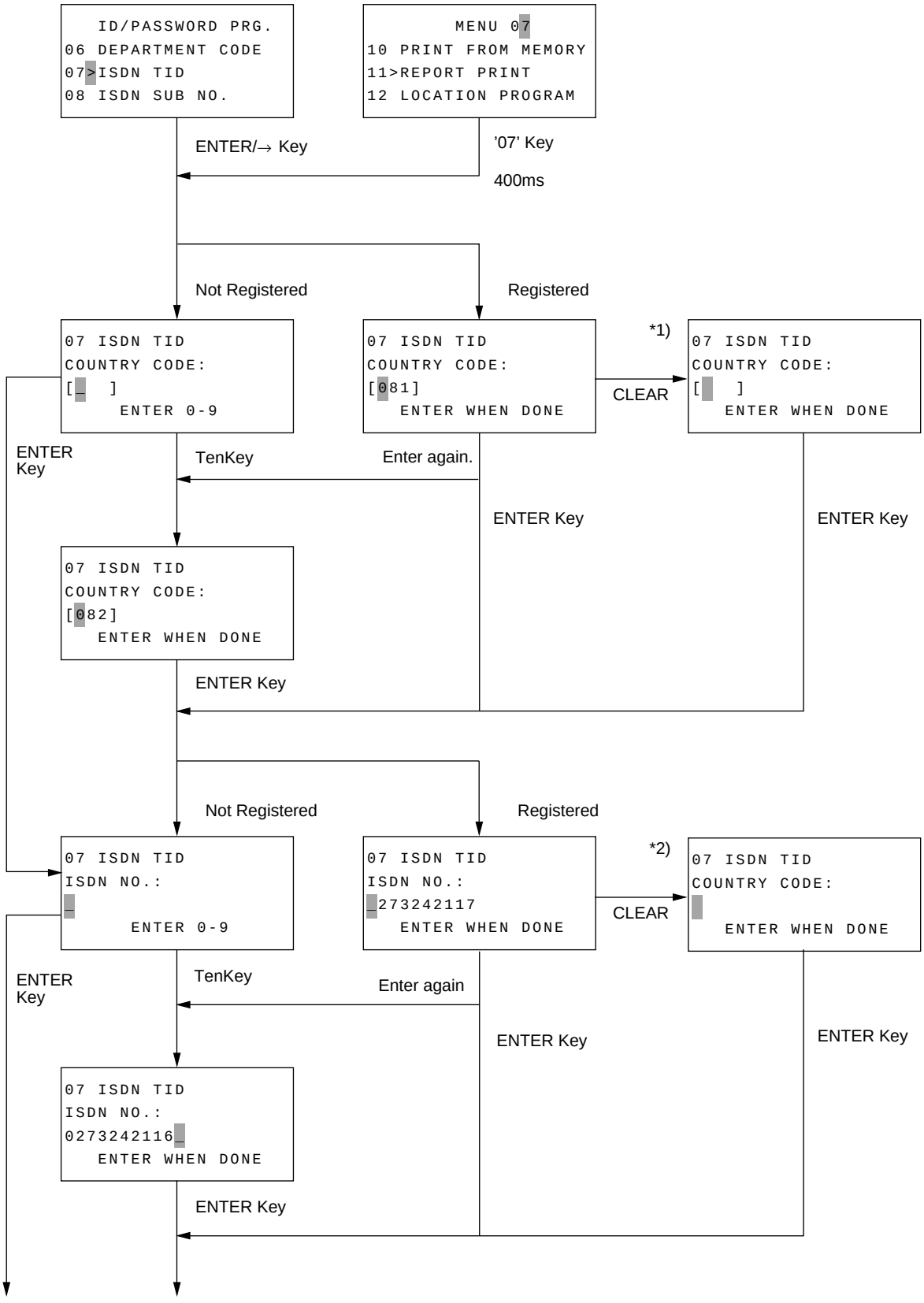


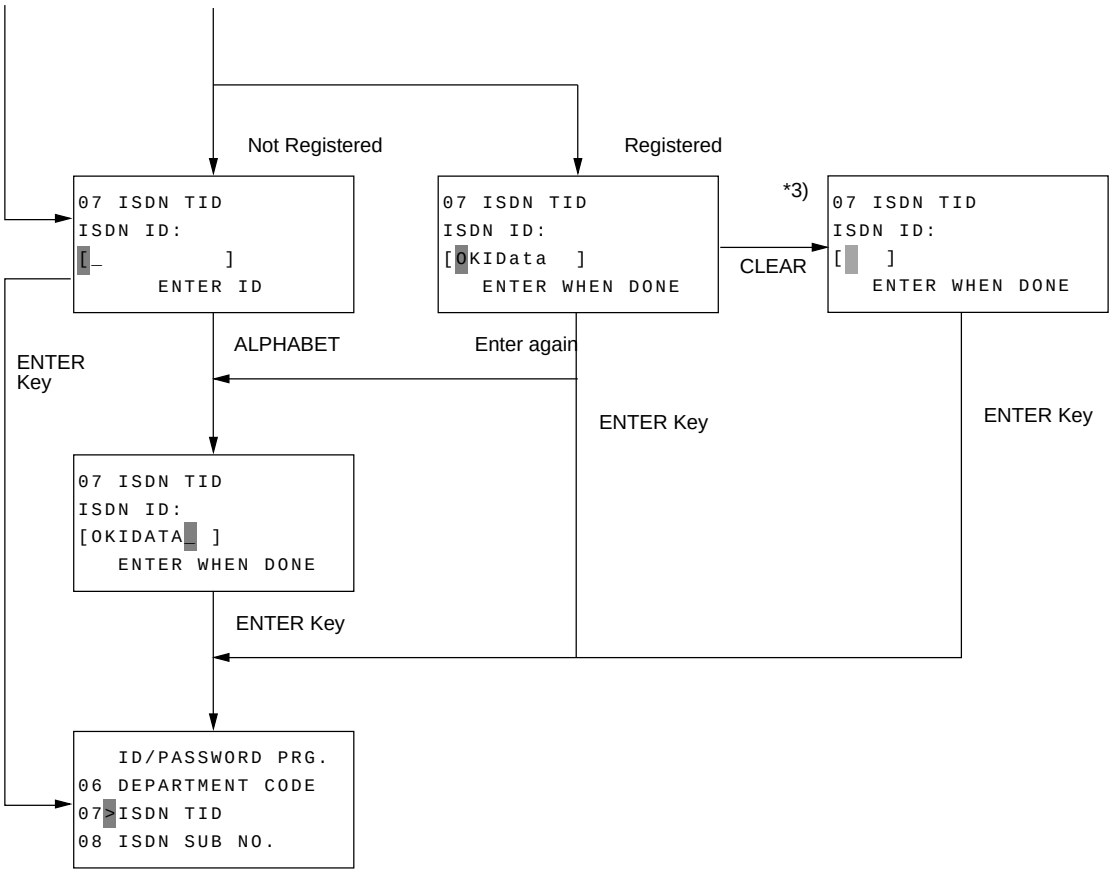
*1:Enter a sender ID with a maximum of 32 characters.
* Lowercase letters can be used.

```
03 SENDER ID
           CAPS OFF
OKI DATA SYSTEM
```

2.9.5.2.4 ISDN Tid

This function is used to set a terminal ID.





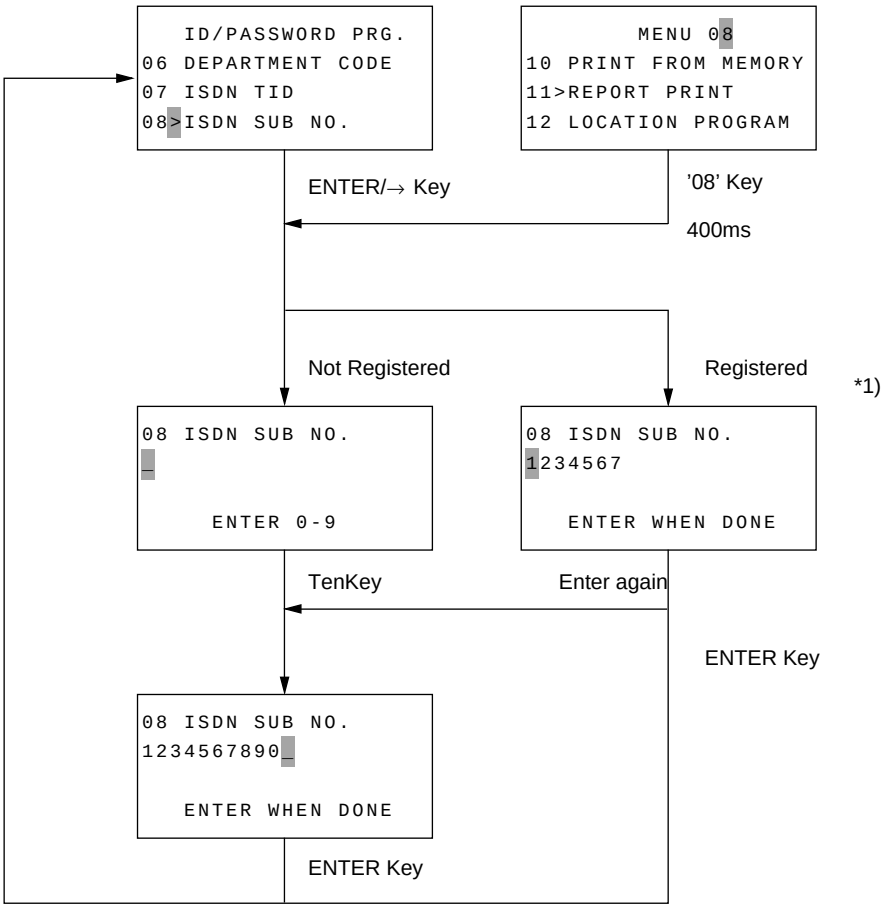
*1:Enter a country code only with digits (max. 3 digits).
*2:Enter an ISDN (subscriber number) only with digits (max. 20 digits).
*3:Enter an ISDN ID (subscriber code) only with alphanumeric characters (lowercase characters can be used) (max. 10 characters).

```
07 ISDN TID
ISDN ID:      CAPS OFF
[OKIDATA  ]
   ENTER WHEN DONE
```

* Country Code, ISDN No. and ISDN ID can be registered respectively and independently.
* Country Code, ISDN No. and ISDN ID can erase contents of registration with CLEAR or DEL key.

2.9.5.2.5 ISDN Sub No.

This function is used to set a sub address.



*1:Enter a sub address only with digits (max. 19 digits).

Table 2.9.5.2 ID/Password Prg. (1/4)

No.	Item	Specifications
01	TSI/CSI	Register a TSI/CSI (local telephone number). 1) Number of characters used to register a TSI/CSI 20 characters (ten-keys 0-9/SPACE/+) * The setting data must be transferred to the G4 board.
02	TSI/CSI OPTION	Register a TSI/CSI (local telephone number) (For the option line) 1) Number of characters used to register a TSI/CSI. 20 characters (ten-key 0-9/SPACE/+) * This setting is disabled when G3 OPTION is not installed.
03	Sender ID	Register a sender ID. 1) Number of characters used to register a sender ID 32 characters Ten-keys 0-9/*/#/alphabetic characters (uppercase and lowercase characters)/special characters/PAUSE/HYPHEN/SPACE/+ * The setting data must be transferred to the G4 board.
04	Personal Box	Open/close a personal box (confidential and bulletin relay broadcast). When the specified box has not been opened: “CONFIDENTIAL” or “BULLETIN POLLING RELAY BROADCAST” can be selected. When the specified box is opened as a confidential box, “CONFIDENTIAL” or “CLOSE” can be selected. When the specified box is opened as a bulletin, “BULLETIN POLLING” or “CLOSE” can be selected. When the specified box is opened as a relay broadcast, “RELAY BROADCAST” or “CLOSE” can be selected. 1) Number of personal boxes FX-056VP/176VP: 16 boxes (1-16) * The user can set these 16 boxes as confidential and bulletin boxes as desired. 2) Confidential A box used only for confidential reception. Either sub frame or Oki mode (NSF) can be selected. When a confidential box is opened, a password must be registered so that other persons cannot print data. Password: 4 digits (0-9 only) 3) Bulletin Poll A box used for bulletin transmission. It is opened to multiple persons. (Password setting is not required.) An SEP frame can be used for bulletin transmission. A document is assigned to a box so that data can be obtained from this box.

Table 2.9.5.2 ID/Password Prg. (2/4)

No.	Item	Specifications
		4) Relay Broadcast Box for relay broadcasting. Handles Personal Box number as the relay group number. Register password and the group address (relay broadcast address) when opening the relay broadcast box. Password: Fixed to 4 digits (0 to 9 only) Group address: Specification by Speed Dial enabled (Discretely not allowed) Registration by Group Dial enabled. Whole Speed Dial may be registered as one group for maximum. Speed Dial to which Email address is registered may be specified. (Email Locations and PSTN / ISDN TEL No.(s) are allowed to be registered within one group.) In addition, registration operation for Speed Dial/Personal Box in use before the distribution is completed is inhibited. * When RELAY BROADCAST = OFF, opening Relay Broadcast Box is inhibited. * Box is not cleared if RELAY BROADCAST = OFF with Relay Broadcast Box already opened. * If all addresses are erased from open Relay Broadcast Box, the box will be closed. * In the case of FX-056VP device, setting is skipped. (Only FX-176VP is operable.) * When the Speed Dial(s) that are registered Email Locations are registered in the Relay Box, and if the Account No. is eliminated and also NIC TYPE2 is not installed, then only the Email locations from Relay Box should be eliminated. And if all the registered locations are Email Locations then the whole Relay Box should be eliminated. * Use SEP/SUB frames respectively for board transmission or confidential reception. * Conventional polling (S bit) and confidential (NSS) are inherited to retain communicability with the existing machines. * Use SID and SUB frames for Relay Broadcast. * Relay broadcast by NSS is enabled. Communicability with the existing machines will be retained. (Continued to sts1225)

Table 2.9.5.2 ID/Password Prg. (3/4)

No.	Item	Specifications
05	Mem. Password	Set the password for using the Auto Answer Mode (MEM.: Memory only reception mode). Persons who do not know the password cannot make changes or print memory data in the Auto Answer Mode (MEM. mode). * This setting is disabled when Auto Answer Mode is set to MEM. 1) Number of Mem. passwords that can be registered FX-056VP/176VP: 1 2) Number of characters used to specify a Mem. password 4 characters (digits only) 3) Password check The entered password cannot be checked on the machine. However, it can be checked using RMCS.
06	Department Code	Register an operation restriction of its own department. Persons who do not know the password cannot use the machine. A restriction ID can be registered when Department Code (machine setting) is set to ON (The operation restriction of its own department is valid.) 1) Number of registered Department Code OKIFAX5780/5980: 99 2) Password Digit Number 4 characters (digits only) 3) Password check The entered password cannot be checked on the machine. However, it can be checked using RMCS.

Table 2.9.5.2 ID/Password Prg. (4/4)

<table>
<tr><th>No.</th><th>Item</th><th>Specifications</th></tr>
<tr><td>07</td><td>ISDN TID</td><td>Set a terminal ID.

1) Setting values
This setting consists of the following:
- Country code
3 characters (digits only)

- ISDN No. (subscriber number)
20 characters (digits only)

- ISDN ID (subscriber code)
10 characters (alphabetic characters, lowercase characters)

* This setting can be made when ISDN option is provided.
* The setting data must be transfered to the G4 board.

<table><tr><th>Handling in G3 mode</th><th>Handling in G4 mode</th></tr><tr><td>Not used</td><td>Switching in standard procedure.
Used for location display. Used for TSI/CIL printing.
ISDN No. is used for collating closed area communication.</td></tr><tr><td colspan="2">In case of origination, the ISDN number if used for reporting the calling subscriber number. It is reported to the network.
In case of termination, the ISDN number is used for MSN collation.</td></tr></table></td></tr>
<tr><td>08</td><td>ISDN Sub No.</td><td>Set a sub address.

1) Setting values
19 characters (digits only)

* This setting can be made when ISDN option is provided.
* The setting data must be transferred to the G4 board.

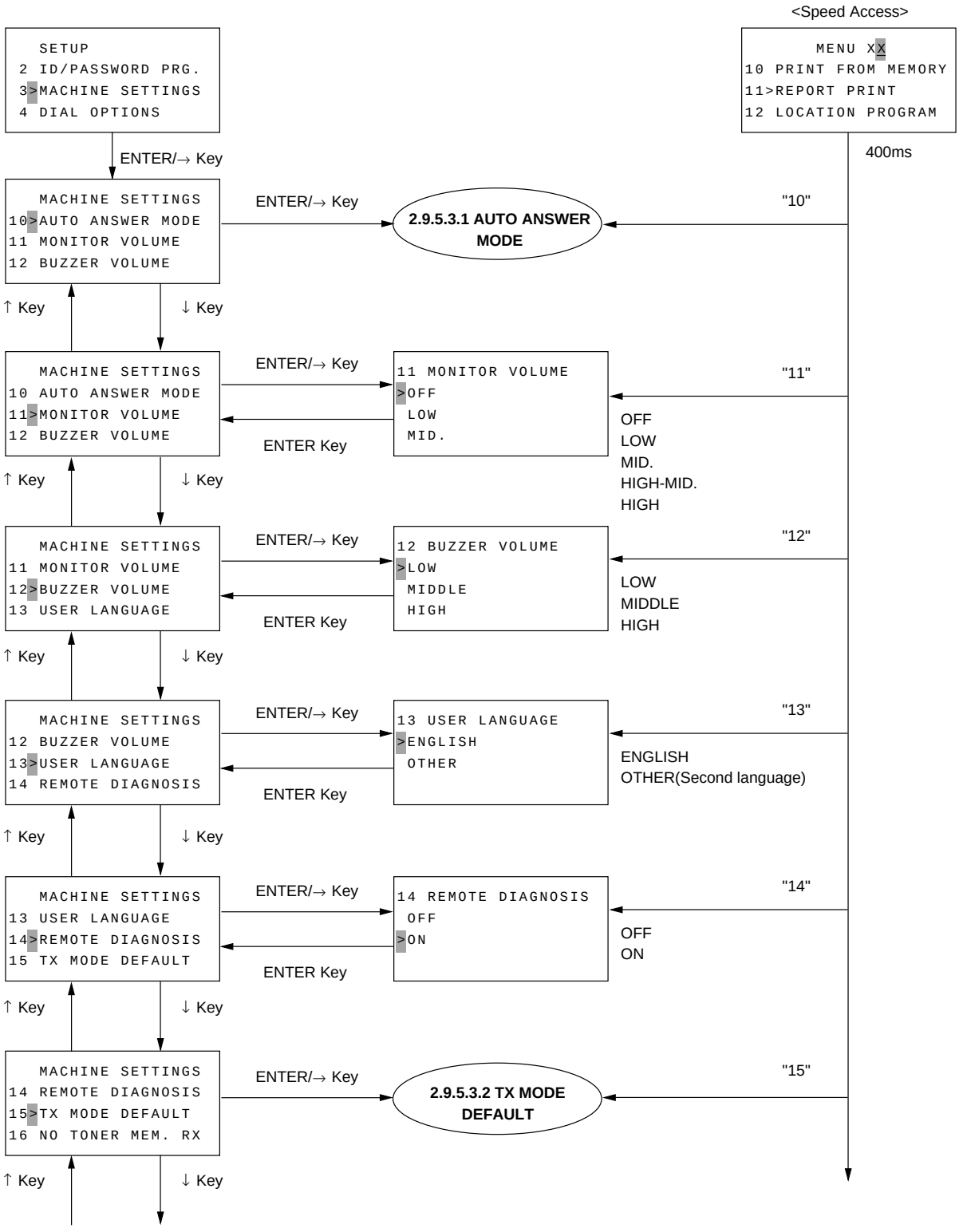
<table><tr><th>Handling in G3 mode</th><th>Handling in G4 mode</th></tr><tr><td colspan="2">Used for sub collation.</td></tr></table></td></tr>
</table>

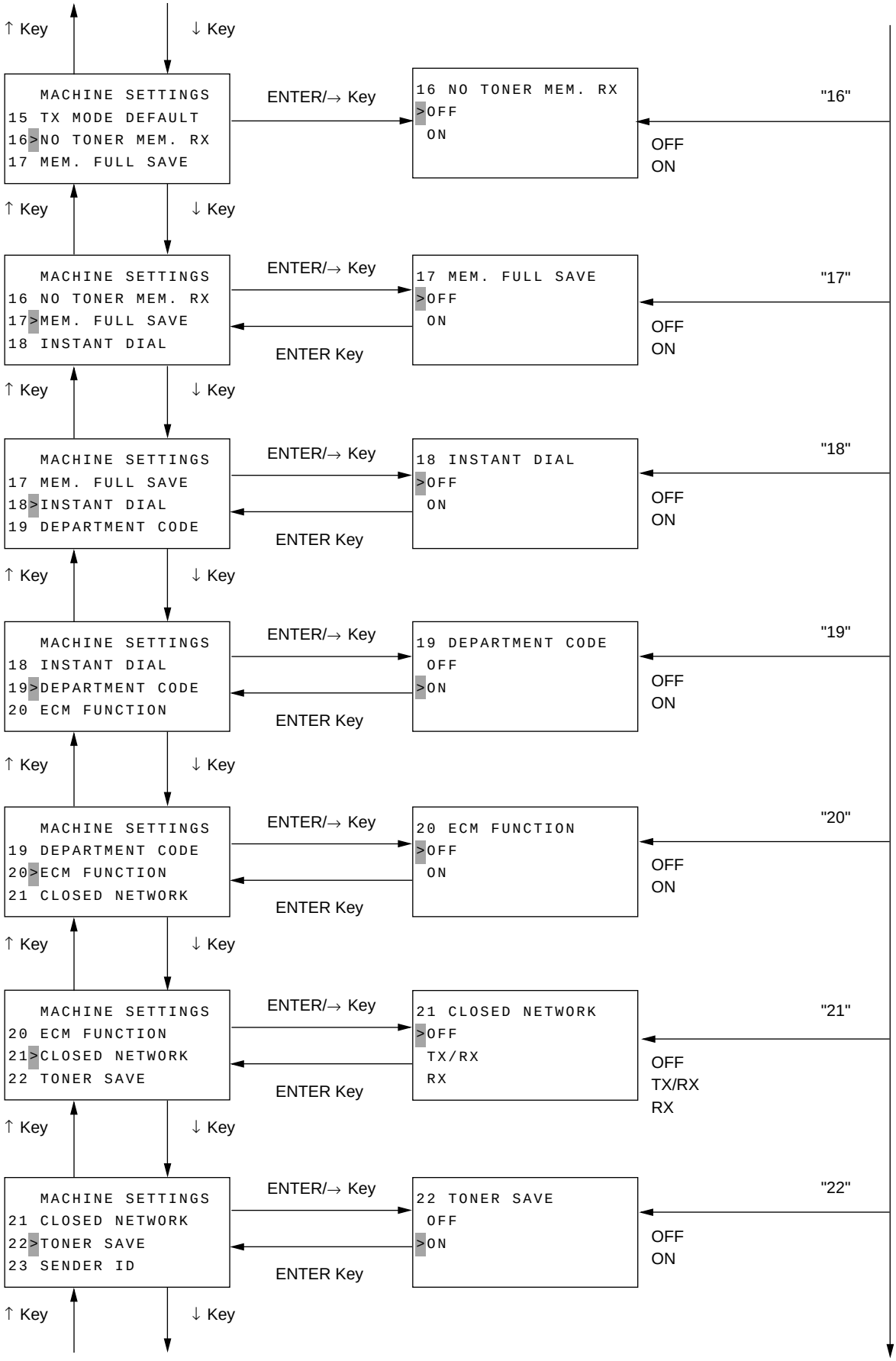
2.9.5.3 Machine Settings

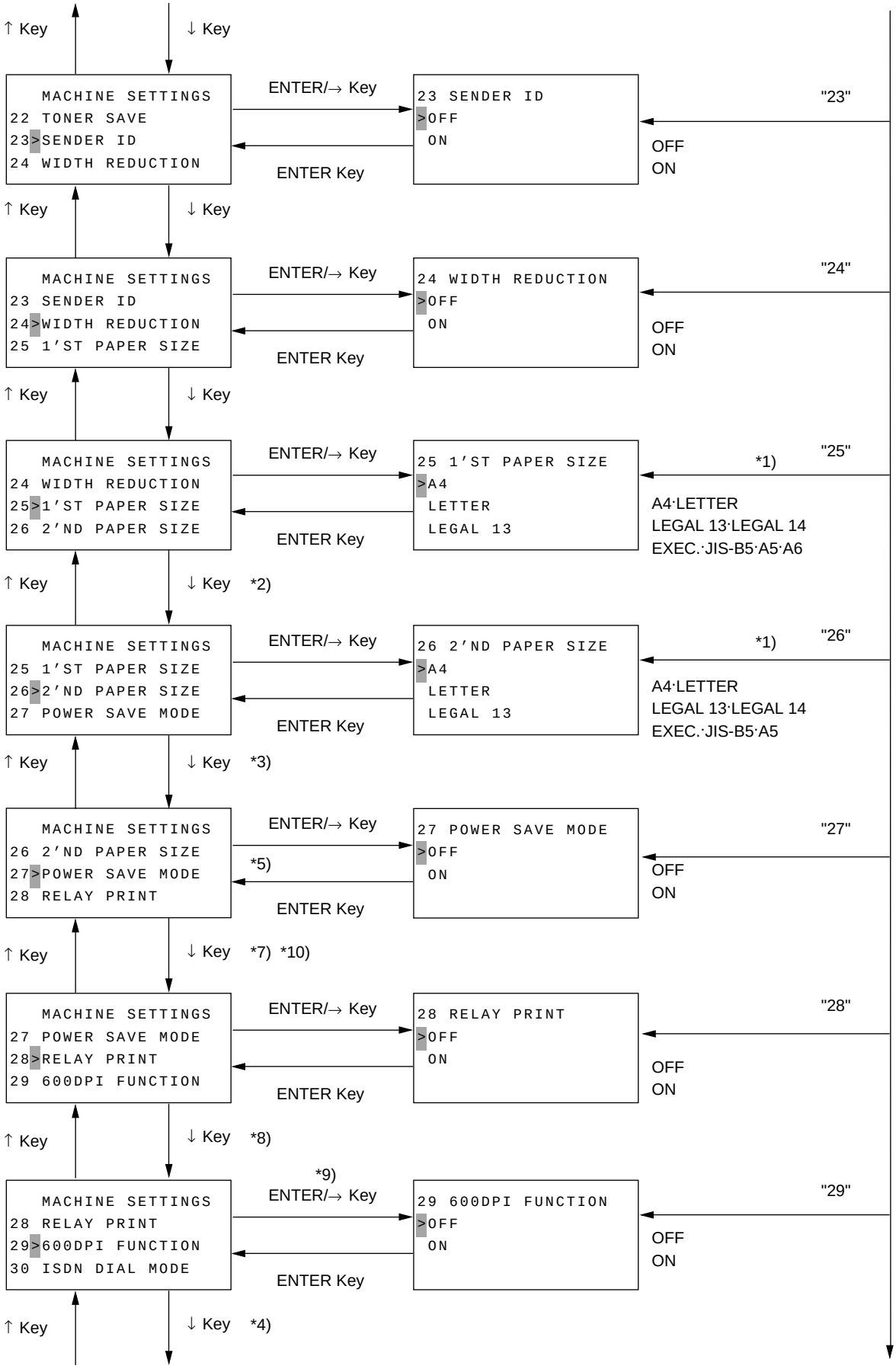
Usually set up by Users

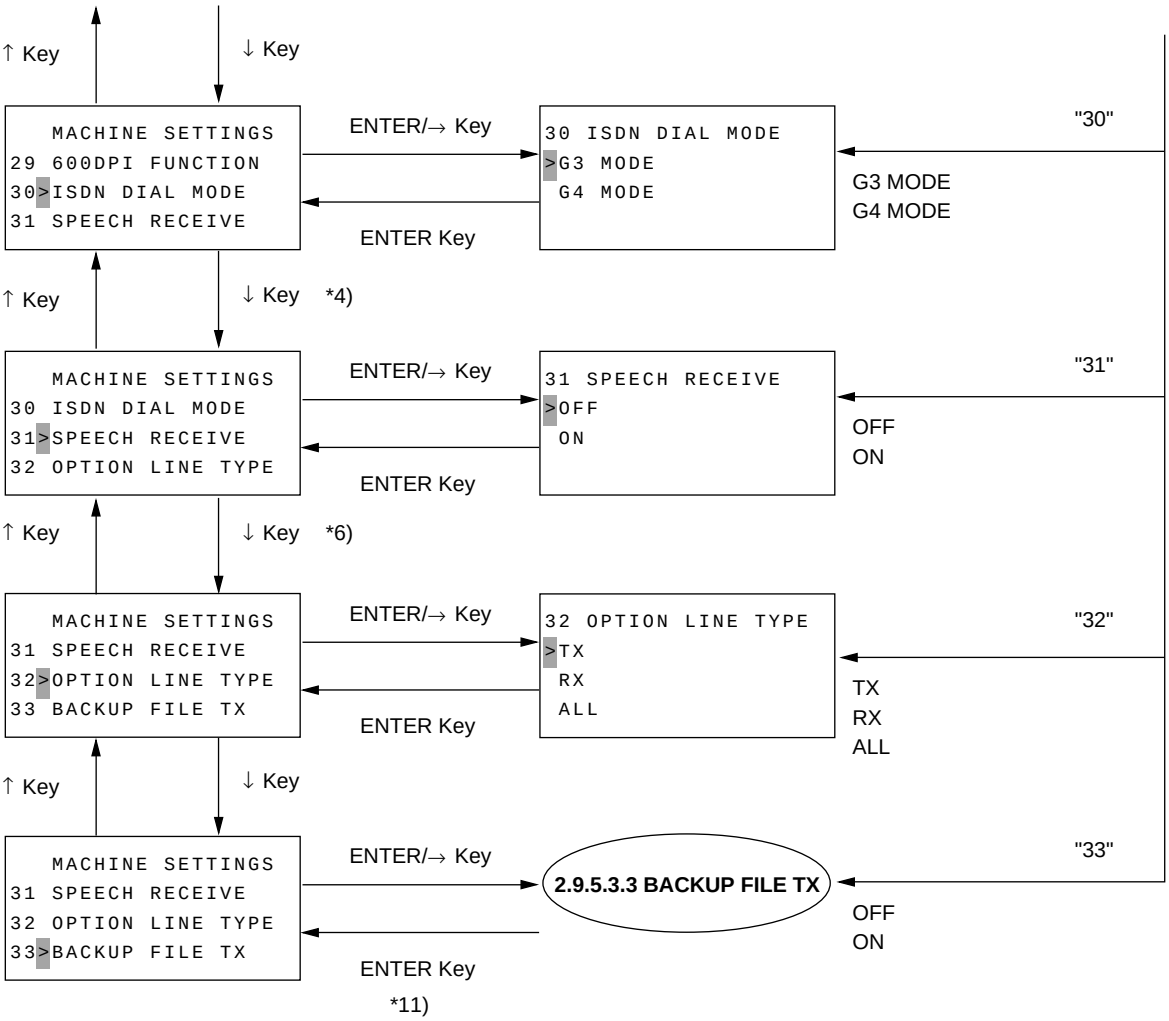
10:	Auto Answer Mode	(FAX/TEL/T/F/TAD/MEM/PC/FWD)
11:	Monitor Volume	(OFF/LOW/MID./HIGH-MID./HIGH)
12:	Buzzer Volume	(LOW/MIDDLE/HIGH)
13:	User Language	(ENGLISH/OTHER)
14:	Remote Diagnosis	(OFF/ON)
15:	TX Mode Default	(STANDARD/FINE/EXTRA FINE/PHOTO) (LIGHT/NORMAL/DARK)
16:	No Toner Mem. RX	(OFF/ON)
17:	Mem. Full Save	(OFF/ON)
18:	Instant Dialing	(OFF/ON)
19:	Department Code	(OFF/ON)
20:	ECM Function	(OFF/ON)
21:	Closed Network	(OFF/TX/RX/RX)
22:	Toner Save	(OFF/ON)
23:	Sender ID	(OFF/ON)
24:	Width Reduction	(OFF/ON)
25:	1'st Paper Size	(A4/LETTER/LEGAL 13/LEGAL 14/EXEC./JIS-B5/A5/A6)
26:	2'nd Paper Size	(A4/LETTER/LEGAL 13/LEGAL 14/EXEC./JIS-B5/A5)
27:	Power Save Mode	(OFF/ON)
28:	Relay Print	(OFF/ON)
29:	600DPI Function	(OFF/ON)
30:	ISDN Dial Mode	(G3 MODE/G4 MODE)
31:	Speech Receive	(OFF/ON)
32:	Option Line Type	(TX/RX/ALL)
33:	Backup File TX	(OFF/ON)

See Table 2.9.5.3 Machine Setting for the detail.


SETUP
2 ID/PASSWORD PRG.
3>MACHINE SETTINGS
4 DIAL OPTIONS
ENTER/→ Key
MACHINE SETTINGS
10>AUTO ANSWER MODE
11 MONITOR VOLUME
12 BUZZER VOLUME
↑ Key
↓ Key
ENTER/→ Key
2.9.5.3.1 AUTO ANSWER MODE
<Speed Access>
MENU XX
10 PRINT FROM MEMORY
11>REPORT PRINT
12 LOCATION PROGRAM
400ms
"10"
MACHINE SETTINGS
10 AUTO ANSWER MODE
11>MONITOR VOLUME
12 BUZZER VOLUME
11 MONITOR VOLUME
>OFF
LOW
MID.
ENTER Key
"11"
OFF
LOW
MID.
HIGH-MID.
HIGH
MACHINE SETTINGS
11 MONITOR VOLUME
12>BUZZER VOLUME
13 USER LANGUAGE
12 BUZZER VOLUME
>LOW
MIDDLE
HIGH
"12"
LOW
MIDDLE
HIGH
MACHINE SETTINGS
12 BUZZER VOLUME
13>USER LANGUAGE
14 REMOTE DIAGNOSIS
13 USER LANGUAGE
>ENGLISH
OTHER
"13"
ENGLISH
OTHER(Second language)
MACHINE SETTINGS
13 USER LANGUAGE
14>REMOTE DIAGNOSIS
15 TX MODE DEFAULT
14 REMOTE DIAGNOSIS
OFF
>ON
"14"
OFF
ON
MACHINE SETTINGS
14 REMOTE DIAGNOSIS
15>TX MODE DEFAULT
16 NO TONER MEM. RX
2.9.5.3.2 TX MODE DEFAULT
"15"


↑ Key
↓ Key
MACHINE SETTINGS
15 TX MODE DEFAULT
16>NO TONER MEM. RX
17 MEM. FULL SAVE
ENTER/→ Key
16 NO TONER MEM. RX
>OFF
ON
"16"
OFF
ON
MACHINE SETTINGS
16 NO TONER MEM. RX
17>MEM. FULL SAVE
18 INSTANT DIAL
17 MEM. FULL SAVE
>OFF
ON
"17"
ENTER Key
MACHINE SETTINGS
17 MEM. FULL SAVE
18>INSTANT DIAL
19 DEPARTMENT CODE
18 INSTANT DIAL
>OFF
ON
"18"
MACHINE SETTINGS
18 INSTANT DIAL
19>DEPARTMENT CODE
20 ECM FUNCTION
19 DEPARTMENT CODE
OFF
>ON
"19"
MACHINE SETTINGS
19 DEPARTMENT CODE
20>ECM FUNCTION
21 CLOSED NETWORK
20 ECM FUNCTION
>OFF
ON
"20"
MACHINE SETTINGS
20 ECM FUNCTION
21>CLOSED NETWORK
22 TONER SAVE
21 CLOSED NETWORK
>OFF
TX/RX
RX
"21"
OFF
TX/RX
RX
MACHINE SETTINGS
21 CLOSED NETWORK
22>TONER SAVE
23 SENDER ID
22 TONER SAVE
OFF
>ON
"22"


↑ Key
↓ Key
MACHINE SETTINGS
22 TONER SAVE
23>SENDER ID
24 WIDTH REDUCTION
ENTER/→ Key
ENTER Key
23 SENDER ID
>OFF
ON
"23"
OFF
ON
MACHINE SETTINGS
23 SENDER ID
24>WIDTH REDUCTION
25 1'ST PAPER SIZE
24 WIDTH REDUCTION
>OFF
ON
"24"
MACHINE SETTINGS
24 WIDTH REDUCTION
25>1'ST PAPER SIZE
26 2'ND PAPER SIZE
25 1'ST PAPER SIZE
>A4
LETTER
LEGAL 13
*1)
"25"
A4·LETTER
LEGAL 13·LEGAL 14
EXEC.·JIS-B5·A5·A6
*2)
MACHINE SETTINGS
25 1'ST PAPER SIZE
26>2'ND PAPER SIZE
27 POWER SAVE MODE
26 2'ND PAPER SIZE
>A4
LETTER
LEGAL 13
*1)
"26"
A4·LETTER
LEGAL 13·LEGAL 14
EXEC.·JIS-B5·A5
*3)
MACHINE SETTINGS
26 2'ND PAPER SIZE
27>POWER SAVE MODE
28 RELAY PRINT
27 POWER SAVE MODE
>OFF
ON
*5)
"27"
OFF
ON
*7) *10)
MACHINE SETTINGS
27 POWER SAVE MODE
28>RELAY PRINT
29 600DPI FUNCTION
28 RELAY PRINT
>OFF
ON
"28"
OFF
ON
*8)
*9)
MACHINE SETTINGS
28 RELAY PRINT
29>600DPI FUNCTION
30 ISDN DIAL MODE
29 600DPI FUNCTION
>OFF
ON
"29"
OFF
ON
*4)

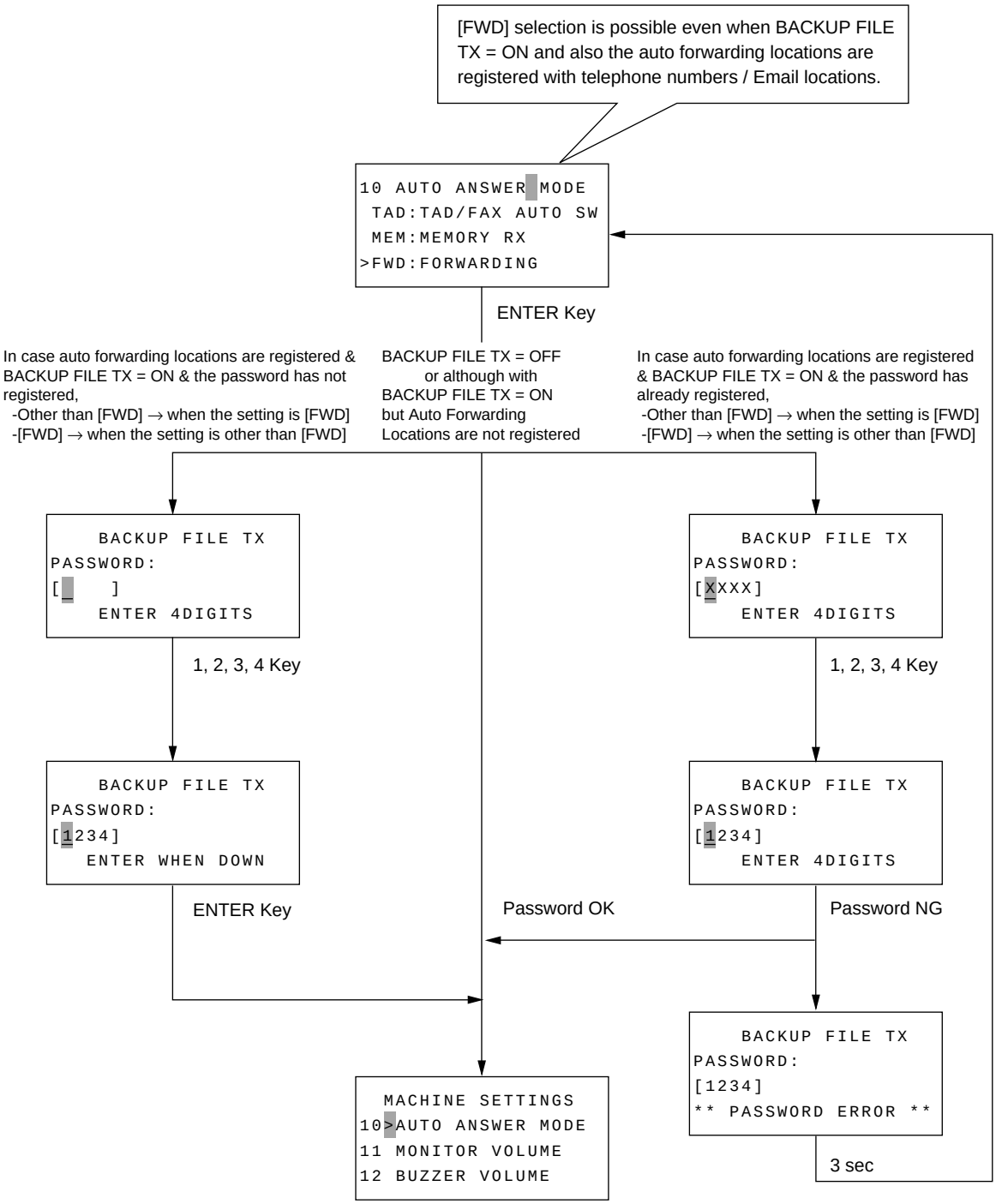


From the MACHINE selection page, some items will be impossible to select with some condition of destinations, equipment specifications, equipment settings, and the like. Even with the situation like this, there are no changes of corresponding numbers of SPEED ACCESS. Thus, if there are any items that are impossible to be selected, those numbers will be displayed with vacant contents.

*1) EXEC./JIS-B5/A5/A6 appears when MFP AVAL. = ON, or when LAN board is loaded in the software.
*2) This transition is available only when 2 nd tray is existing.
*3) In case Default Type = 1 and also Country Code = USA, then this transition is not available.
*4) This transition is available only when there is ISDN option.
In case of MUPIS I/F error, with pressing ENTER/→key, FUNC.NOT AVAIL. will be displayed for 3 sec.
*5) It is not available to select this if LAN board is loaded in the software.
*6) This transition is available only when there is G3 option.
*7) In case of AUTO ANSWER MODE = MEM., the printing is not available. It is handled as memory receiving.
*8) This transition is available only when 8MB potion memory is loaded in the software.
*10) FX-056VP can not be set up skippingly unless NIC TYPE 2 is loaded in the software & GATEWAY SERVICE = ON. FX-176VP can be set up with any conditions.
*11) When OFF → ON is proceeding, if a password is not registered, then its registering should be done here. If a password was already registered, then it is necessary to input the password here, and the change of data is available only when it meets with the registered password.
There is an operation restriction by a password, as it is mentioned above, when OFF → ON is proceeding.

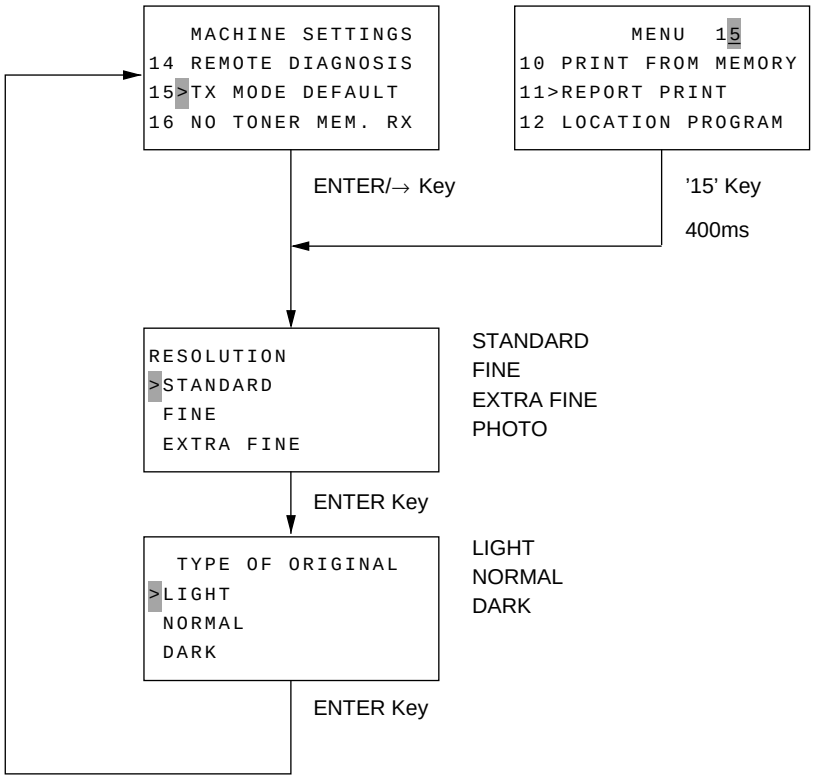
2.9.5.3.1 Auto Answer Mode

This function is used to set up the auto answer mode.


[FWD] selection is possible even when BACKUP FILE TX = ON and also the auto forwarding locations are registered with telephone numbers / Email locations.
10 AUTO ANSWER MODE
TAD:TAD/FAX AUTO SW
MEM:MEMORY RX
>FWD:FORWARDING
ENTER Key
In case auto forwarding locations are registered & BACKUP FILE TX = ON & the password has not registered,
-Other than [FWD] → when the setting is [FWD]
-[FWD] → when the setting is other than [FWD]
BACKUP FILE TX = OFF
or although with
BACKUP FILE TX = ON
but Auto Forwarding
Locations are not registered
In case auto forwarding locations are registered & BACKUP FILE TX = ON & the password has already registered,
-Other than [FWD] → when the setting is [FWD]
-[FWD] → when the setting is other than [FWD]
BACKUP FILE TX
PASSWORD:
[ ]
ENTER 4DIGITS
1, 2, 3, 4 Key
BACKUP FILE TX
PASSWORD:
[1234]
ENTER WHEN DOWN
ENTER Key
BACKUP FILE TX
PASSWORD:
[XXXX]
ENTER 4DIGITS
1, 2, 3, 4 Key
BACKUP FILE TX
PASSWORD:
[1234]
ENTER 4DIGITS
Password OK
Password NG
BACKUP FILE TX
PASSWORD:
[1234]
** PASSWORD ERROR **
3 sec
MACHINE SETTINGS
10>AUTO ANSWER MODE
11 MONITOR VOLUME
12 BUZZER VOLUME

2.9.5.3.2 TX Mode Default

This function is used to set default values for the transmission mode selected with a document set in the feeder.



2.9.5.3.3 BACKUP FILE TX

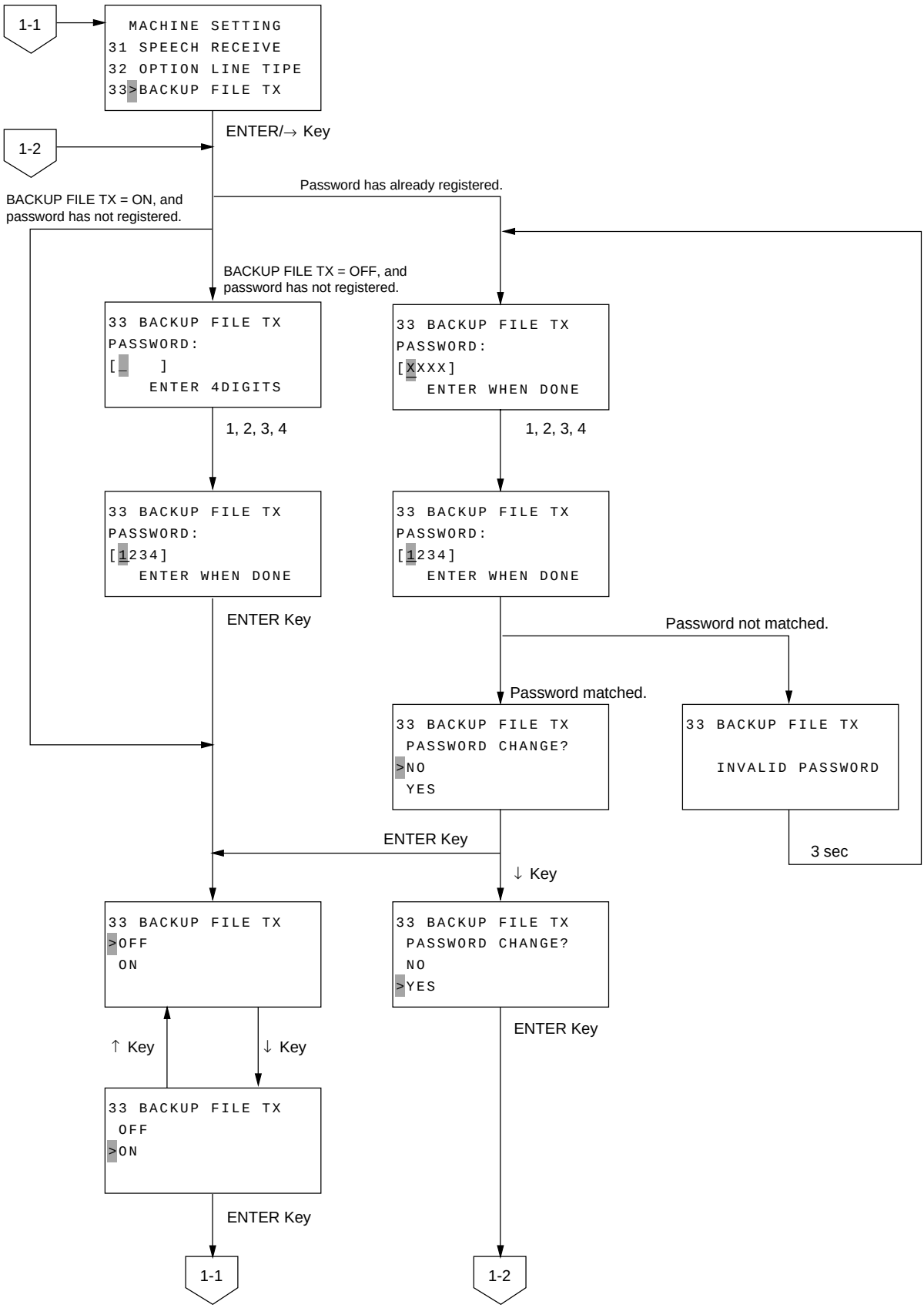


Table 2.9.5.3 Machine Settings (1/6)

Default values are defined by default type.
For details, see machine default setting. The setting data must be transferred to the G3 Option. (excluding ISDN DIAL MODE and SPEECH RECEIVE)

No.	Item	Specifications
10	Auto Answer Mode	Set up the auto answer mode (FAX/TEL/T/F/TAD/MEM/PC/ FWD). The following restrictions are placed on individual mode settings according to the machine status and setting: 1) T/F (TEL/FAX AUTO SW.) mode This mode can be selected only when TEL/FAX Switch is set to ON. * This mode is automatically switched to the FAX mode when TEL/FAX switch is set to OFF. 2) TAD (TAD/FAX AUTO SW.) mode (auto answer mode) This mode can be selected except when TAD is set to OFF (TYPE1-3). * This mode is automatically switched to the FAX mode when TAD MODE is set to OFF. 3) MEM. (MEMORY RX) mode When a memory password was set, this mode cannot be switched to another mode without entering the set password. * When printing memory data without returning to the standby state (the flash memory is has not been written with data in the new mode) after switching between modes under the above condition, the password need not been entered again. 4) PC mode (PCAX mode) * This mode can be selected only when MFP AVAIL is set to ON. (Default setting is ON) * Valid when this mode is set to power off Æ on. 5) FWD (FORWARDING) mode (redirecting mode) This mode can be selected when FORWARDING No. has been programmed. * This mode can be selected only when FORWARDING NO. is already registered. * This mode is automatically switched to the FAX mode when FORWARDING No. is erased. * When G4 is selected, neither T/F nor TAD cannot be selected.
11	Monitor Volume	Set the monitor volume. 1) Setting values OFF/LOW/MID./HIGH-MID./HIGH

Table 2.9.5.3 Machine Settings (2/6)

No.	Item	Specifications
12	Buzzer Volume	Set the buzzer volume (communication end or off-hook alarm). 1) Setting values LOW/MIDDLE/HIGH * The key touch sound level is fixed at LOW.
13	User Language	Select the language used for LCD display or report printing. 1) Setting values English/(other) * Other (second language): GER (German), FRE (French), etc.
14	Remote Diagnosis	Determine whether remote maintenance is to be done from the remote center. 1) Setting values ON (Enables)/OFF (Note disabled)
15	TX Mode Default	Set transmission mode default values used when a document is set in the feeder. The resolution and scanning density (Type of Original) can be set separately. 1) Resolution STANDARD/FINE/EXTRA FINE/PHOTO 2) Scanning density (Type of Original) LIGHT/NORMAL/DARK
16	No Toner Mem. RX	Determine whether data is to be received in the memory or on recording paper when the toner level is low. 1) Setting values ON (Memory reception)/OFF (Recording paper reception) ON: Data received in the memory when the toner level is low. OFF: Data is received on recording paper if the toner level is low (the print quality is poor because the toner level is low).

Table 2.9.5.3 Machine Settings (3/6)

No.	Item	Specifications
17	Mem. Full Save	When the memory becomes full during read, the operator must determine whether the read pages are to be saved or canceled. Determine whether the read pages are to be saved or canceled automatically if the operator forget to save/cancel them and therefore an operation T.O. results. 1) Setting values ON (Saved)/OFF (Canceled) ON: The page being read is discarded and the previously read pages are saved (or transmitted if transmission preparation is specified). OFF: All pages are discarded including the page being read.
18	Instant Dial	Determine whether instant dialing transmission is to be performed. If the remaining memory capacity is not satisfied the instant dial start condition although this setting is ON, the feeder transmission is performed. When this setting is OFF, the feeder transmission is uniformly performed. 1) Setting values ON (Instant dialing transmission is performed)/OFF (Instant dialing transmission is not performed)
19	Department Code	This setting is to decide if the operation restriction of its own department will be done or not. With this setting, a person who does not know the department code can not operate by himself. When the operation restriction by the department is done, from the waiting display, the user will be asked to enter the Department code and Operation restriction password, then the operation will be restricted unless the correct password is entered corresponding to the Department No. The department code entered will be printed on the Activity report. 1) Setting values ON (Operation is restricted)/OFF (Operation is not restricted) ON: The ID/Password Prg. allows a restrict ID to be registered. Operation is restricted only when this setting is ON and a restrict ID has already been registered. OFF: The ID/Password Prg. disables registration of a restrict ID. When this setting is OFF, operation is not restricted irrespective of whether a restrict ID has been registered.
20	ECM Function	Determine whether ECM transmission is to be performed. 1) Setting values ON (ECM transmission performed)/OFF (ECM transmission not performed)

Table 2.9.5.3 Machine Settings (4/6)

No.	Item	Specifications
21	Closed Network	Set up closed network. The TSI/CSI of the remote machine is compared with the low-order 4 digits of the speed dial of the local machine. If they match, closed network is performed. If they do not match, closed network is not performed. 1) Setting values OFF: Closed network is not performed. TX/RX: Closed network is performed for both transmission and reception. RX: Closed network is performed only for reception.
22	Toner Save	Determine whether toner saving is to be performed during fax printing. When a LAN/PC printer is used, this setting is ignored and the command from the host is executed. 1) Setting values ON (Toner saving performed)/OFF (Toner saving is not performed)
23	Sender ID	Determine whether the sender ID is to be added to the sending data. A maximum of 32 characters are added to only outside the document. 1) Setting values ON (Added)/OFF (Not added)
24	Width Reduction	This setting is to decide if the main scan reduction will be done or not. 1) Setting Value ON (with reduction) / OFF (without reduction)
25	1'st Paper Size	Set the size of recording paper in the first cassette. As the recording paper size is not detected automatically, the operator must set it. 1) Setting values A4/LETTER/LEGAL 13/LEGAL 14/EXEC./JIS-B5/A5/A6 * The setting data must be transferred to the G4 board.
26	2'nd Paper Size	Set the size of recording paper in the second tray. 1) Setting values A4/LETTER/LEGAL 13/LEGAL 14/EXEC./JIS-B5/A5 * The setting data must be transferred to the G4 board.

Table 2.9.5.3 Machine Settings (5/6)

No.	Item	Specifications
27	Power Save Mode	Determine whether the current mode is to be switched to the Power Save mode. The power supply will be fed to all circuits of a fax machine whenever the fax goes to the operating state. The power save mode has reduced the power consumption at standby to below xxW. 1) Setting values ON (Switched)/OFF (Not switched) * When Default Type is set to 1 and Country Code is set to USA, the Power Save mode cannot be selected. * This mode cannot be made when LAN board is installed.
28	Relay Print	Sets up whether to print picture received during relay reception. 1) Setting value ON (print)/ OFF (not print) * When in MEM mode, no printing if this setting is ON. * In case of FX-056VP, if NIC TYPE2 is installed & GATE-WAY SERVICE = ON, then skip this setting. In case of FX-176VP, the setting is available with any conditions.
29	600DPI Function	Sets up whether to effect communication and/or printing with 600 DPI x 600 DPI. 1) Setting value ON/OFF ON: Of 8MB memory, the DRAM area for 4MB is set aside as a shared area for print buffer and the picture storage. Only when this area is not in use, 600 dpi communication (transmission-reception) and copying will be enabled. OFF: Option memory of 8MB is all used for storing pictures. Therefore, resolution of communication and copying remain unchanged from conventional data (not for 600 dpi). * Setting enabled only when 8MB optional memory is installed. If pictures received with 600 dpi are present in the picture memory, “INVALID OPERATION” warning will be displayed when shifting to the lowest hierarchy.
30	ISDN Dial Mode	Determine whether G4 communication is to be performed by calling a single remote machine by pressing ten-keys when an ISDN option is provided. 1) Setting values G3 MODE (G3 communication)/G4 MODE (G4 communication) * This setting cannot be made when an ISDN option is not provided.

Table 2.9.5.3 Machine Settings (6/6)

No.	Item	Specifications
31	Speech Receive	Determine whether the incoming call is answered when the information transmission capacity instracted by the network is voice transmission. 1) Setting values ON (Answered)/OFF (Not answered) * This setting cannot be made when ISDN option board is not provided.
32	Option Line Type	Sets up the objectives of using option line. 1) Setting value TX/RX/ALL TX: For transmission only RX: For reception only ALL: For both transmission and reception * Setting disabled without G3 option.
33	Backup File TX	This setting is to decide if the function that the designated locations is valid or not. When sending mails by auto sending / forwarding settings, this setting is to decide if the function of sending automatically to the designated locations and the function to print out by its own station are made to be available or not, and also to set a password. Designated Location : the location registered in SD40. (TEL / EMAIL) 1) Setting Values ON (make it valid) / OFF (make it invalid) Password : 4 digits always (only 0 ~ 9)

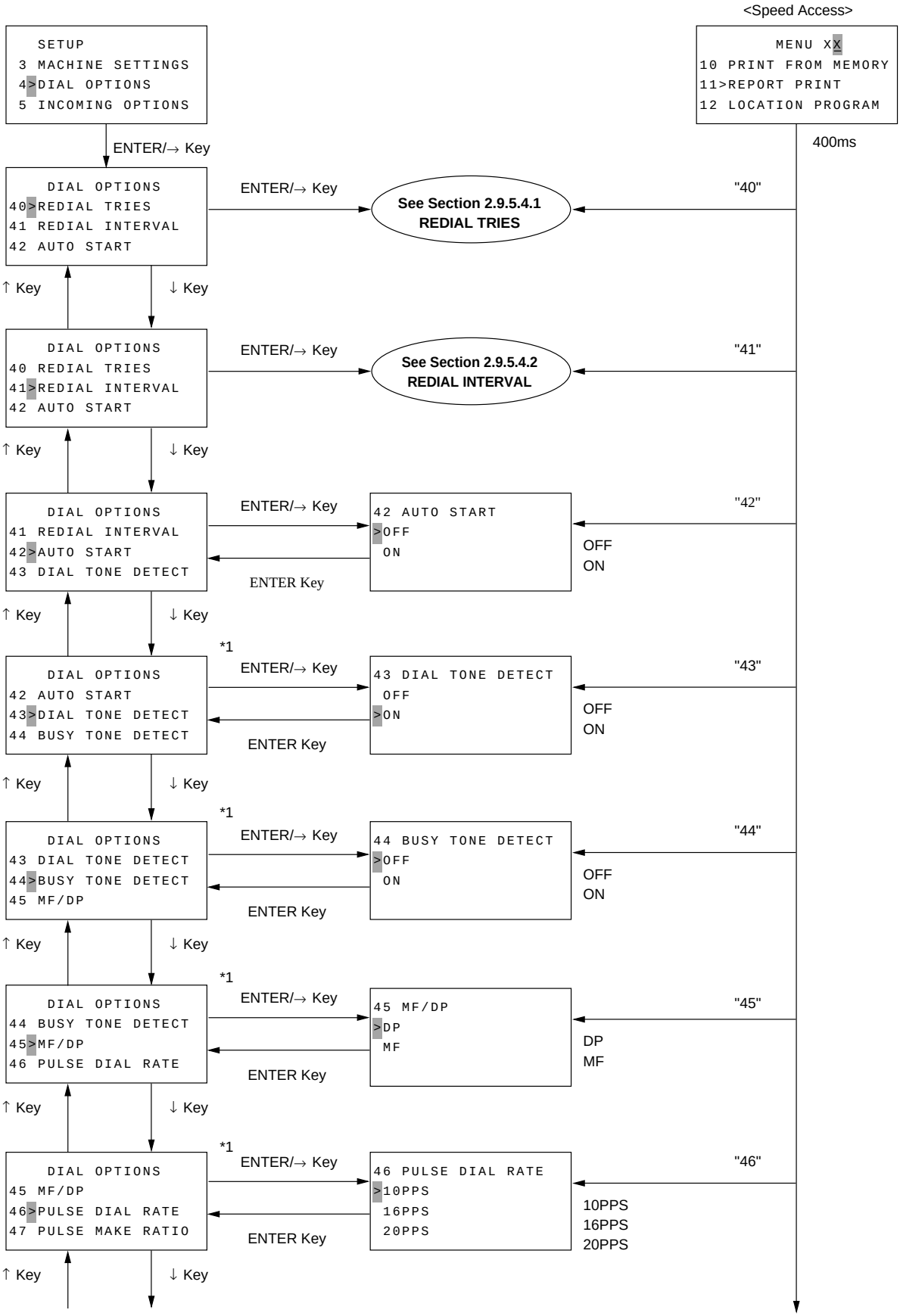
2.9.5.4 DIAL OPTIONS

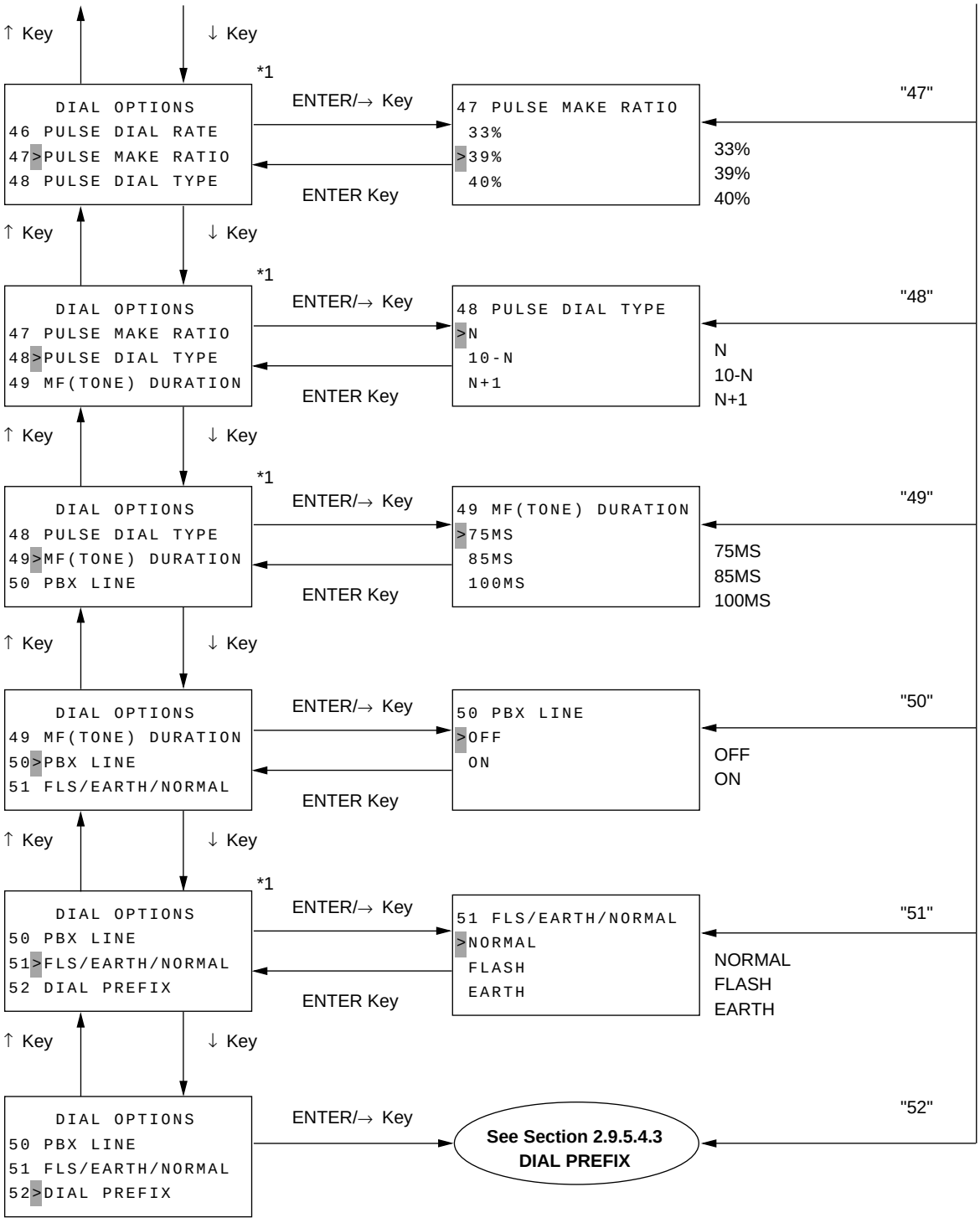
Line condition settings

40:	Redial Tries	(0 to 10 tries; except FRA) (1 to 5 tries for FRA)
41:	Redial Interval	(1 to 6 minutes; except FRA) (1 to 12 minutes for FRA)
42:	Auto Start	(OFF/ON)
43:	Dial Tone Detect	(OFF/ON)
44:	Busy Tone Detect	(OFF/ON)
45:	MF/DP	(MF/DP)
46:	Pulse Dial Rate	(10pps/16pps/20pps)
47:	Pulse Make Ratio	(33%/39%/40%)
48:	Pulse Dial Type	(N/10-N/N+1)
49:	MF (Tone) Duration	(75ms/85ms/100ms)
50:	PBX Line	(OFF/ON)
51:	Fls/Earth/Normal	(NORMAL/FLASH/EARTH)
52:	Dial Prefix	(OFF/4-digit)

See Table 2.9.5.4 Dialing Options for the detail.

Note: These setting are also applied to G3 option board.


SETUP
3 MACHINE SETTINGS
4>DIAL OPTIONS
5 INCOMING OPTIONS
ENTER/→ Key
<Speed Access>
MENU XX
10 PRINT FROM MEMORY
11>REPORT PRINT
12 LOCATION PROGRAM
400ms
DIAL OPTIONS
40>REDIAL TRIES
41 REDIAL INTERVAL
42 AUTO START
ENTER/→ Key
See Section 2.9.5.4.1
REDIAL TRIES
"40"
↑ Key
↓ Key
DIAL OPTIONS
40 REDIAL TRIES
41>REDIAL INTERVAL
42 AUTO START
ENTER/→ Key
See Section 2.9.5.4.2
REDIAL INTERVAL
"41"
↑ Key
↓ Key
DIAL OPTIONS
41 REDIAL INTERVAL
42>AUTO START
43 DIAL TONE DETECT
ENTER/→ Key
42 AUTO START
>OFF
ON
"42"
OFF
ON
ENTER Key
↑ Key
↓ Key
*1
DIAL OPTIONS
42 AUTO START
43>DIAL TONE DETECT
44 BUSY TONE DETECT
ENTER/→ Key
43 DIAL TONE DETECT
OFF
>ON
"43"
OFF
ON
ENTER Key
↑ Key
↓ Key
*1
DIAL OPTIONS
43 DIAL TONE DETECT
44>BUSY TONE DETECT
45 MF/DP
ENTER/→ Key
44 BUSY TONE DETECT
>OFF
ON
"44"
OFF
ON
ENTER Key
↑ Key
↓ Key
*1
DIAL OPTIONS
44 BUSY TONE DETECT
45>MF/DP
46 PULSE DIAL RATE
ENTER/→ Key
45 MF/DP
>DP
MF
"45"
DP
MF
ENTER Key
↑ Key
↓ Key
*1
DIAL OPTIONS
45 MF/DP
46>PULSE DIAL RATE
47 PULSE MAKE RATIO
ENTER/→ Key
46 PULSE DIAL RATE
>10PPS
16PPS
20PPS
"46"
10PPS
16PPS
20PPS
ENTER Key
↑ Key
↓ Key

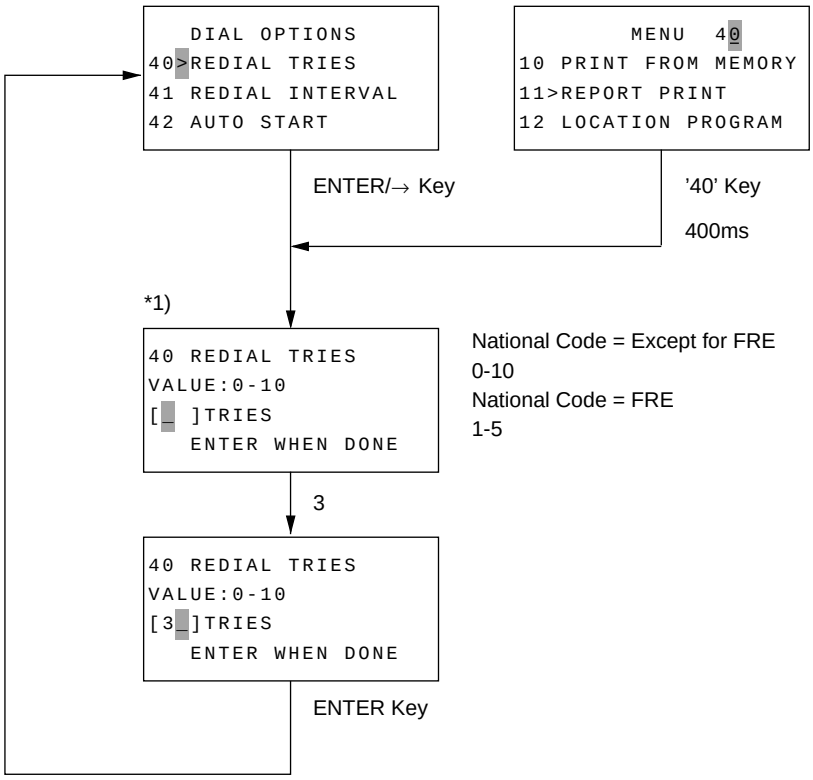


Some options of the DIAL OPTIONS menu cannot be selected depending on the destination of delivery, machine specs, and machine settings. However, numbers related to speed access are fixed.
If there are unselective options, these numbers become discontinuous.

*1:This setting can be skipped when ISDN board is installed. (However, this setting can be made only when service bit is set to ON.)

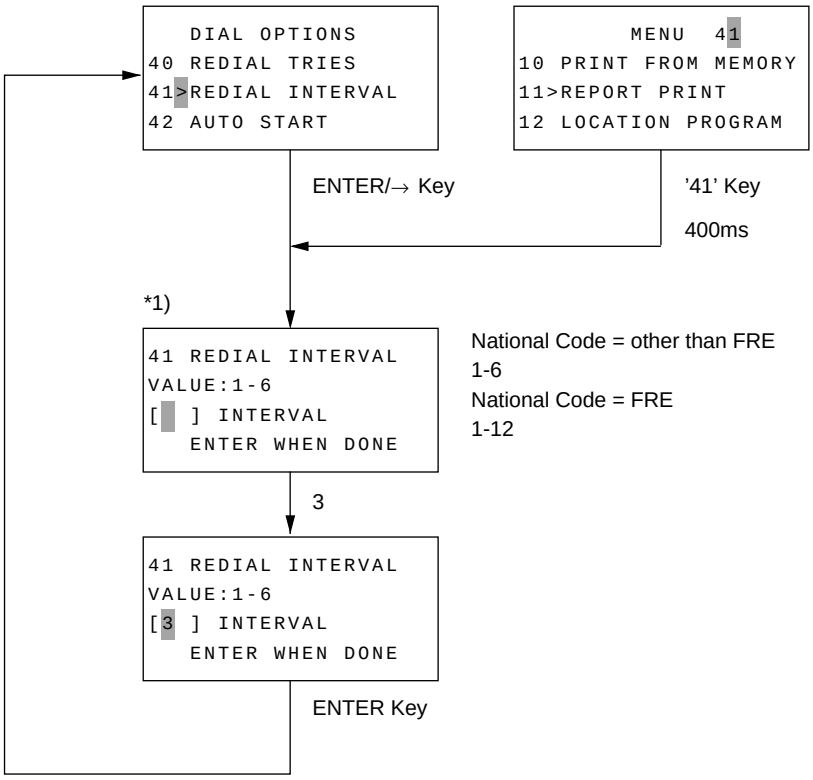
2.9.5.4.1 Redial Tries

This function is used to set the number of redial tries.



2.9.5.4.2 Redial Interval

This function is used to set an auto redial interval.

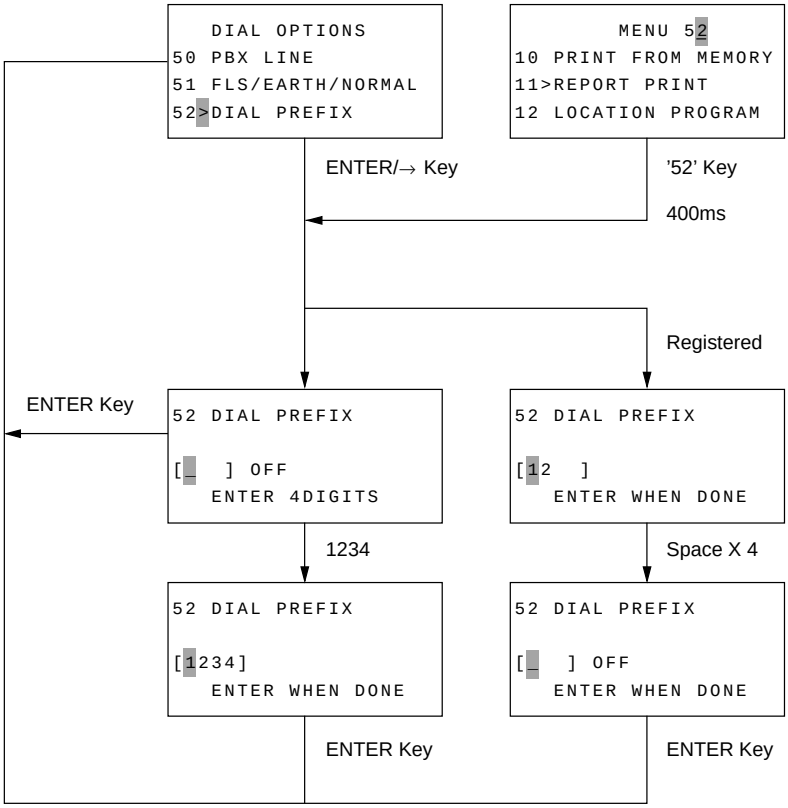


*1:When National code is set to FRE, the following screen appears:

```
41 REDIAL INTERVAL
VALUE:1-12
[_ ] INTERVAL
   ENTER WHEN DONE
```

2.9.5.4.3 Dial Prefix

This function is used to set the access digits for connecting a PBX line to the public line.



*: OFF appears when spaces are entered for all digits.

*:Movement and display of cursor during input of spaces and digits
- The blinking cursor moves to the first digit position when four characters (including digits and spaces) have been entered.
- When spaces are included in the 4-digit data, they are truncated on the screen.

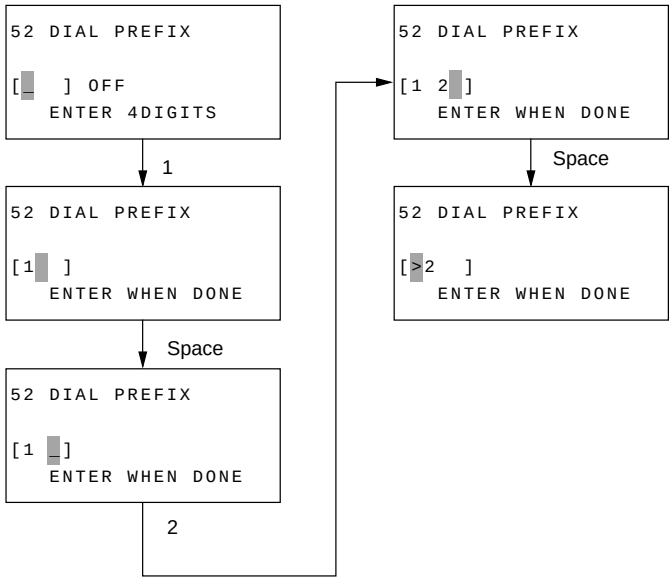


Table 2.9.5.4 Dial Options (1/3)

Setting values are defined for each country code.
For more details, see Section 2.9.6, “Defaults.”
The setting data must be transferred to the G3 Option.

No.	Item	Specifications
40	Redial Tries	Sets on the redial tries to meet the regulations of the installed country. 1) Setting values Country code = Other than FRE: 0-10 (in one-try steps) FRE: 1-5 (in one-try steps)
41	Redial Interval	Set an automatic redialing interval to meet the regulations of installed country. 1) Setting values Country code = Other than FRE: 1-6 (in one-minute steps) FRE: 1-12 (in one-minute steps)
42	Auto Start	Determine whether a call is to be originated automatically without pressing the START key after specifying a destination with a speed dial key. 1) Setting values ON (Automatic origination)/OFF (Call is not originated until START key is pressed)
43	Dial Tone Detect	Determine whether a dial tone is to be detected. 1) Setting values ON (Detected)/OFF (Not detected) * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
44	Busy Tone Detect	Determine whether a busy tone is to be detected. 1) Setting values ON (Detected)/OFF (Not detected) * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
45	MF/DP	Determine whether MF or DP is to be used for call origination. 1) Setting values MF (Tone)/DP (Pulse) * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)

Table 2.9.5.4 Dial Options (2/3)

No.	Item	Specifications
46	Pulse Dial Rate	Determine a DP pulse rate used at call origination. 1) Setting values 10PPS/16PPS/20PPS selectable * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
47	Pulse Make Ratio	Set a DP make ratio at used at call origination. 1) Setting values 33%/39%/40% selectable * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
48	Pulse Dial Type	Set a DP dial type. 1) Setting values N/10-N/N+1 selectable N: Dial the selected number. 10-N: Dial the number obtained by subtracting the selected number from the selected number. N + 1: Dial the number obtained by adding 1 to the selected number. * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
49	MF (Tone) Duration	Set the MF duration. 1) Setting values 75 ms/85 ms/100 ms selectable * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
50	PBX Line	Determine whether the machine is to be connected to the PBX line. 1) Setting values ON (Connected to PBX)/OFF (Not connected to PBX) * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)

Table 2.9.5.4 Dial Options (3/3)

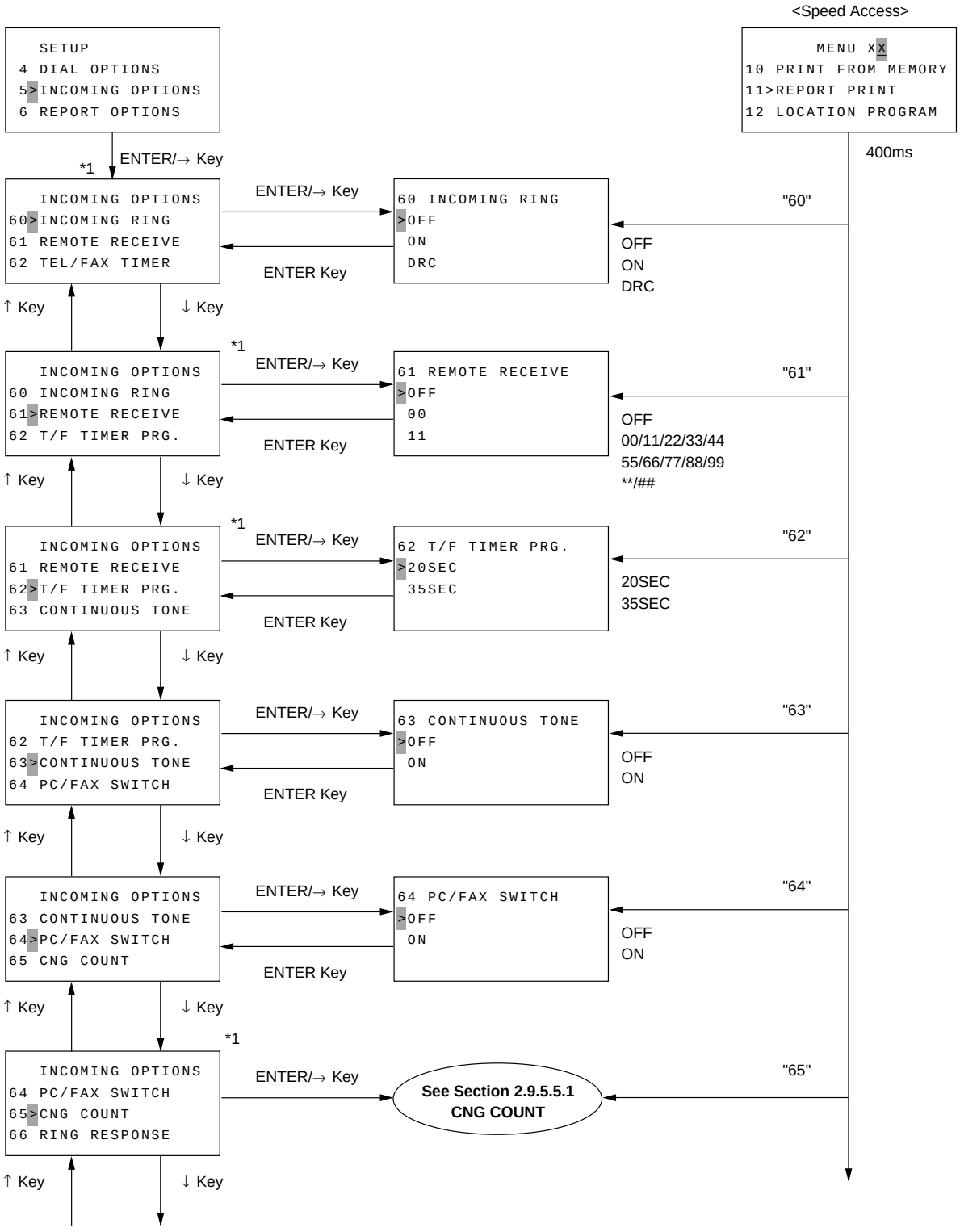
No.	Item	Specifications
51	Fls/Earth/Normal	Set the method of switching between flash and earth modes for PBX line. 1) Setting values NORMAL/FLASH/EARTH selectable (PBX line origination types) * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)
52	Dial Prefix	Set the access digits used for connecting the PBX line to the public line. 1) Setting values OFF 1- to 4-digit access digit (digits only) * Access digits are validated when a numeric value is entered. * All spaces: OFF * Selection is skipped over when the ISDN board is mounted. (Selection allowed if SERVICE BIT=ON)

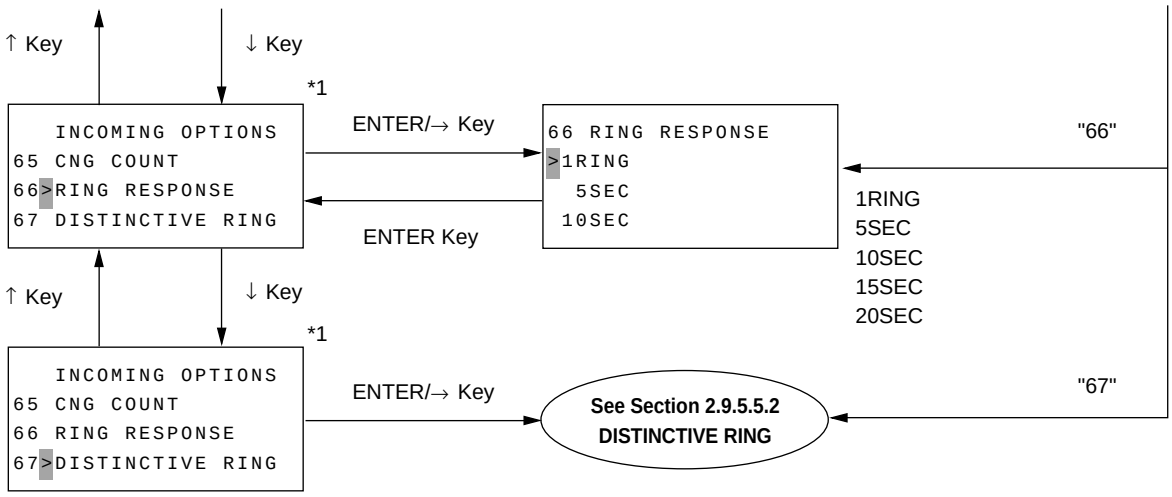
2.9.5.5 Incoming Options

Incoming line condition settings

60:	Incoming Ring	(ON/OFF/DRC)
61:	Remote Receive	(OFF/00/11/22/33/44/55/66/77/88/99/**/##)
62:	T/F Timer Prg.	(20SEC/35SEC)
63:	Continuous Tone	(OFF/ON)
64:	PC/FAX Switch	(OFF/ON)
65:	CNG Count (1-5)	(1 to 5)
66:	Ring Response	(1RING/5SEC/10SEC/15SEC/20SEC)
67:	Distinctive Ring	(ON/OFF/SET)

See Table 2.9.5.5 Incoming Options for the detail.

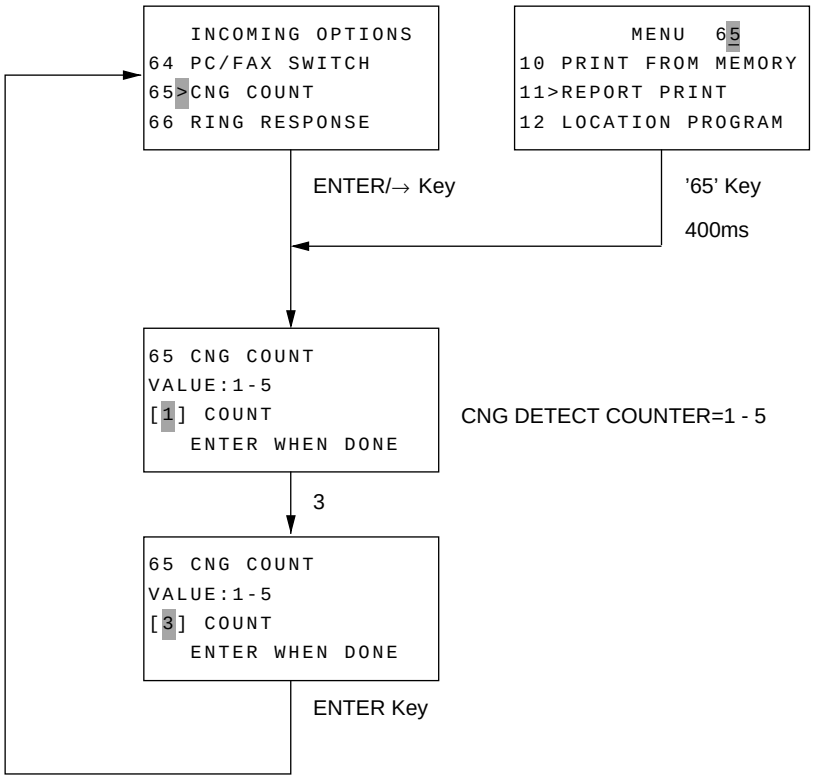

SETUP
4 DIAL OPTIONS
5>INCOMING OPTIONS
6 REPORT OPTIONS
<Speed Access>
MENU XX
10 PRINT FROM MEMORY
11>REPORT PRINT
12 LOCATION PROGRAM
400ms
ENTER/→ Key
*1
INCOMING OPTIONS
60>INCOMING RING
61 REMOTE RECEIVE
62 TEL/FAX TIMER
60 INCOMING RING
>OFF
ON
DRC
"60"
OFF
ON
DRC
ENTER Key
↑ Key
↓ Key
INCOMING OPTIONS
60 INCOMING RING
61>REMOTE RECEIVE
62 T/F TIMER PRG.
61 REMOTE RECEIVE
>OFF
00
11
"61"
OFF
00/11/22/33/44
55/66/77/88/99
**/##
INCOMING OPTIONS
61 REMOTE RECEIVE
62>T/F TIMER PRG.
63 CONTINUOUS TONE
62 T/F TIMER PRG.
>20SEC
35SEC
"62"
20SEC
35SEC
INCOMING OPTIONS
62 T/F TIMER PRG.
63>CONTINUOUS TONE
64 PC/FAX SWITCH
63 CONTINUOUS TONE
>OFF
ON
"63"
OFF
ON
INCOMING OPTIONS
63 CONTINUOUS TONE
64>PC/FAX SWITCH
65 CNG COUNT
64 PC/FAX SWITCH
>OFF
ON
"64"
OFF
ON
INCOMING OPTIONS
64 PC/FAX SWITCH
65>CNG COUNT
66 RING RESPONSE
See Section 2.9.5.5.1
CNG COUNT
"65"



Some options of the INCOMING OPTIONS menu cannot be selected depending on the destination of delivery, machine specs, and machine settings. However, numbers related to speed access are fixed.
If there are unselective options, these numbers become discontinuous.

*1:This setting can be skipped when ISDN board is installed. (However, this setting can be made only when service bit is set to ON.)

2.9.5.5.1 CNG Count



2.9.5.5.2 Distinctive Ring

This function is used to make settings for distinctive ring learning (remembrance) and detection.

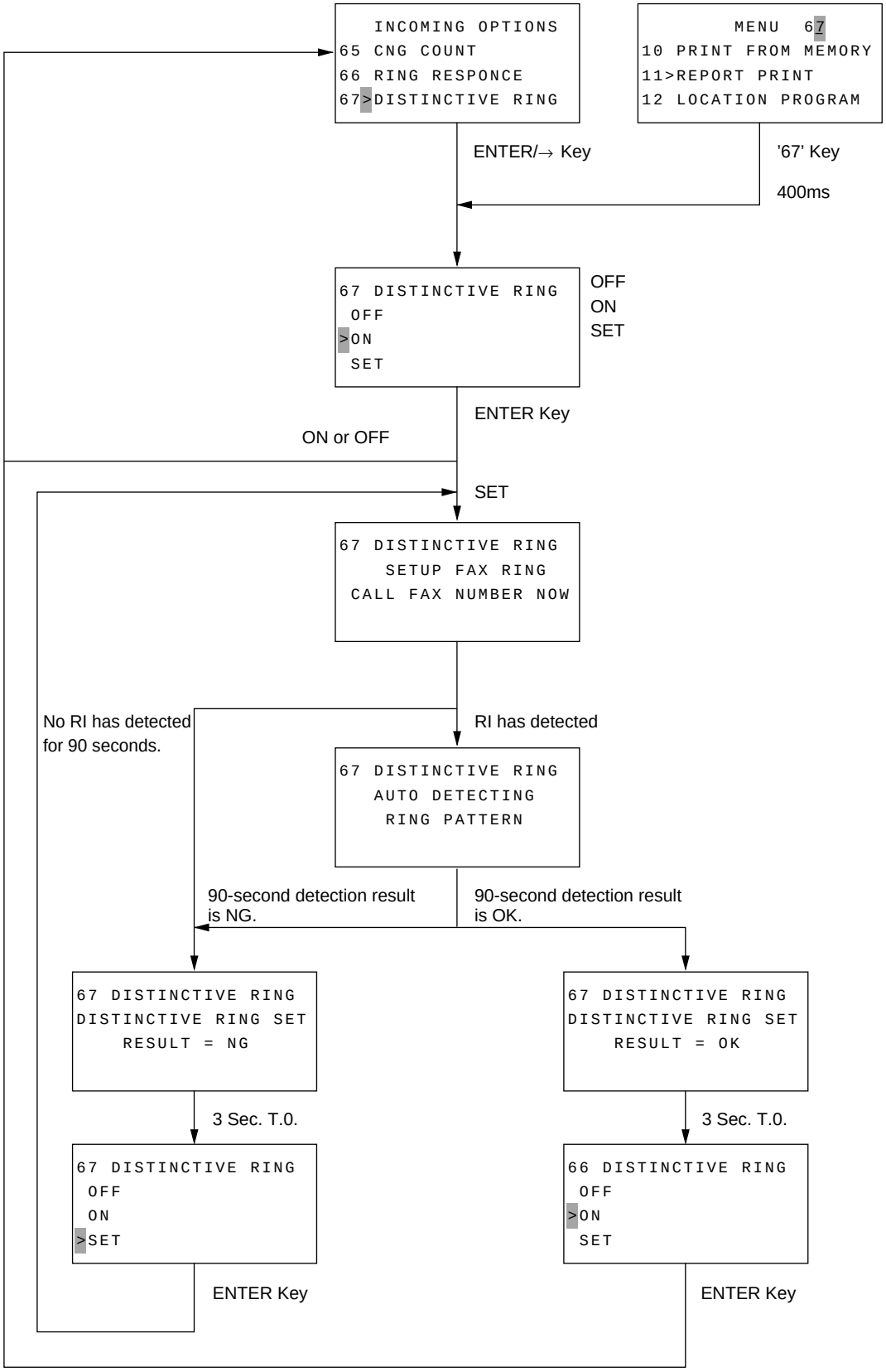


Table 2.9.5.5 Incoming Options (1/3)

Setting values are defined for each default type.
For more details, see Incoming default settings.
The setting data must be transferred to the G3 Option side.

No.	Item	Specifications
60	Incoming Ring	Set up the soft ringer. Instead of ringer circuit, software can control built-in speaker to ring sound. 1) Setting values ON (Sounded)/OFF (Not sounded)/DRC (Sounded during DRC detection) * Selection is skipped over when the ISDN board is mounted (selection allowed if SERVICE BIT = ON). * If DISTINCTIVE RING is settable, ON/OFF/DRC is selectable. (“Settable” means that SERVICE BIT is ON or mask by XPARA is not provided with SERVICE BIT = OFF.) * If DISTINCTIVE RING cannot be set, ON or OFF is selectable. * Setting is possible if SERVICE BIT is ON even though masking is done by XPARA. In this case, if SERVICE BIT is turned OFF with this setting set to DRC, setting is changed from DRC to the default (i.e. initial value provided for each default type). * If COUNTRY CODE is USA, AUS, NZL, SIN, or HNG, this setting is set to DRC. If COUNTRY CODE is changed to any other country, setting is changed from DRC to the default.
61	Remote Receive	Set a remote access address. This function is used to transfer a call received by an external telephone set (connected to fax) by entering two-digit MF tones if the remote receive setting is not OFF. When this function is off, control of Parallel Pick Up doesnt do it at all regardless of ON/OFF of Parallel Pick Up setting. 1) Setting values Select one of the following: OFF/00/11/22/33/44/55/66/77/88/99/**/## * Selection is skipped over when the ISDN board is mounted (selection allowed if SERVICE BIT = ON).

Table 2.9.5.5 Incoming Options (2/3)

No.	Item	Specifications
62	T/F Timer Prg.	Set the time till start of automatic reception when the operator has performed no operation for the call terminated in the TEL/ FAX mode. 1) Setting values 20SEC/35SEC selectable * Selection is skipped over when the ISDN board is mounted (selection allowed if SERVICE BIT = ON).
63	Continuous Tone	Set up the reception completion buzzer. The buzzer sound can be stopped by pressing the STOP key. 1) Setting values ON (Sounded)/OFF (Not sounded)
64	PC/FAX Switch	Determine whether the FAX reception mode is to be selected automatically when PC reception is impossible. 1) Setting values ON: Selects the FAX reception mode. Fax transfers received faxes directly to PC. OFF: Does not select the FAX reception mode (reception disabled). Fax receives and prints the message.
65	CNG Count	When T/F, TAD, or Parallel pickup is operating in CNG signal detection processing, this setting can be shifted to the facsimile reception mode at the time of number of CNG signal detection times are equal to the set values. 1) Setting values 1 - 5 (in one-tray steps) * Selection is skipped over when the ISDN board is mounted (selection allowed if SERVICE BIT = ON).
66	Ring Response	Sets the time from arrival of a ring to line seizure 1) Setting values 1 ring/5 sec/10 sec/15 sec/20 sec * Selection is skipped over when the ISDN board is mounted (selection allowed if SERVICE BIT = ON).

Table 2.9.5.5 Incoming Options (3/3)

No.	Item	Specifications
67	Distinctive Ring	Determine whether a distinctive is to be remembered and detected. Only in GER, SUI, and AUT modes, OFF is set as the default. When ON is selected, reception operation starts only when a remembered ring pattern is detected. If it has not been remembered, a ring pattern defined for each country as the default is used to detect it. 1) Setting values ON (Detected)/OFF (Not detected)/SET (Remembered) * Selection is skipped over when the ISDN board is mounted. (selection allowed if SERVICE BIT=ON) * When changing the country code, this mode is forcibly set to OFF. * In case of applicable countries of DRC remenbered ring pattern (Country code = USA, AUS, NZL, SIN, and HUG), OFF/ON/SET can be selected as default. Except for above country, OFF/SET can be selected as default.

2.9.5.6 Report Options

The report print allows selecting 4 items shown below.

70: MCF. (Single-Loc.) (OFF/ON)
71: MCF, (Multi-Loc.) (OFF/ON)
72: Image In MCF. (OFF/ON)
73: Error Report (MCF.) (OFF/ON)

See Table 2.9.5.6 Report Options for the detail.

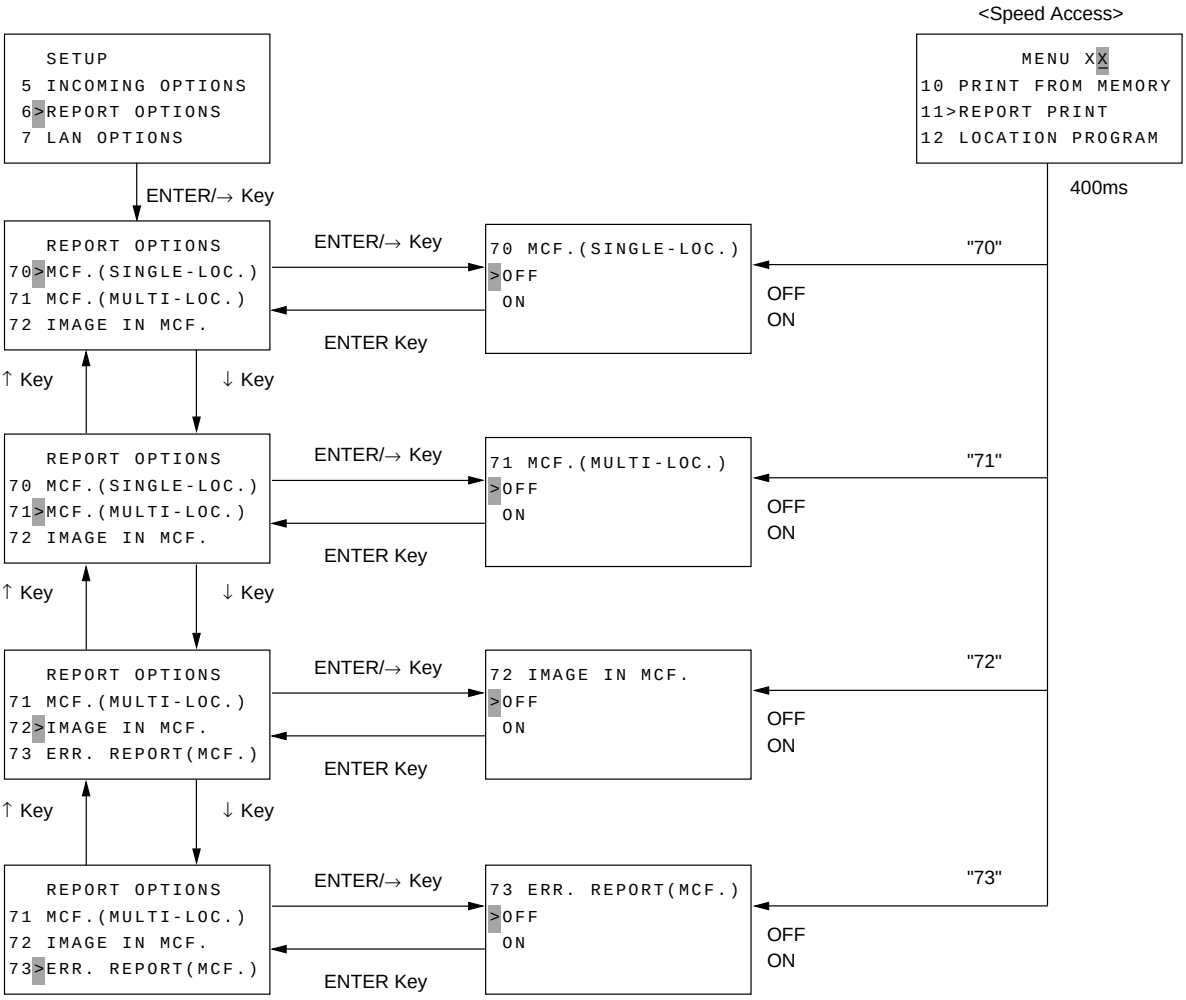


Table 2.9.5.6 Report Options

Setting values are defined for each default type.
For more details, see Section 2.9.6, “Defaults.”
The setting data must be transferred to the G3 Option side.

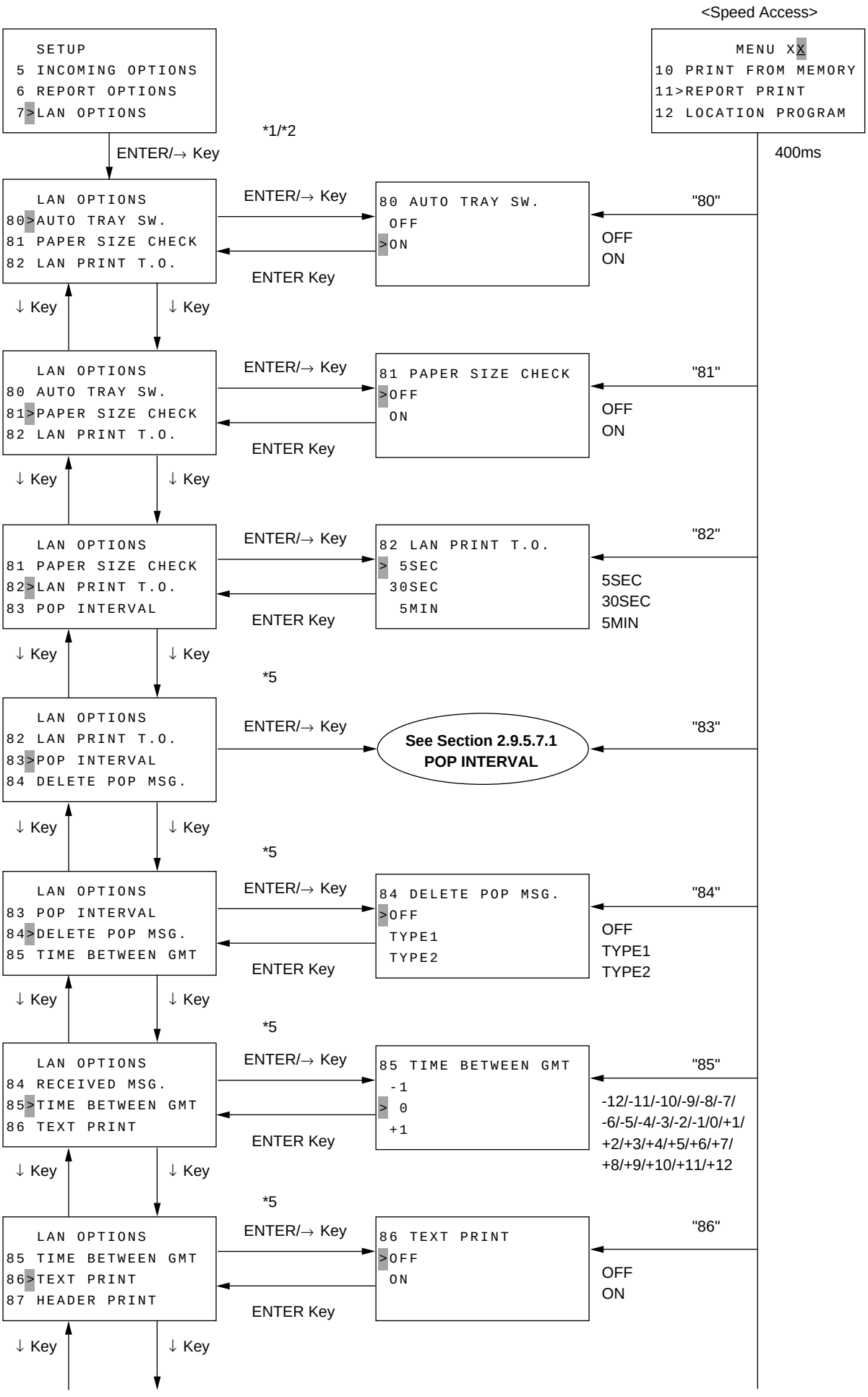
No.	Item	Specifications
70	MCF. (Single-Loc.)	Determine whether a single location transmission result report is to be output automatically. 1) Setting values ON (Report is output automatically)/OFF (Report is not output automatically)
71	MCF. (Multi-Loc.)	Determine whether a multi-location transmission result report is to be output automatically. 1) Setting values ON (Report is output automatically)/OFF (Report is not output automatically)
72	Image in MCF.	Determine whether an image is to be added to the message confirmation result report. 1) Setting values ON (Image is added)/OFF (Image is not added)
73	Err. Report (MCF.)	Determine whether an error report is to be output automatically when communication does not end with S.C 0000 (service code: 0000). 1) Setting values ON (Report is output automatically)/OFF (Report is not output automatically)

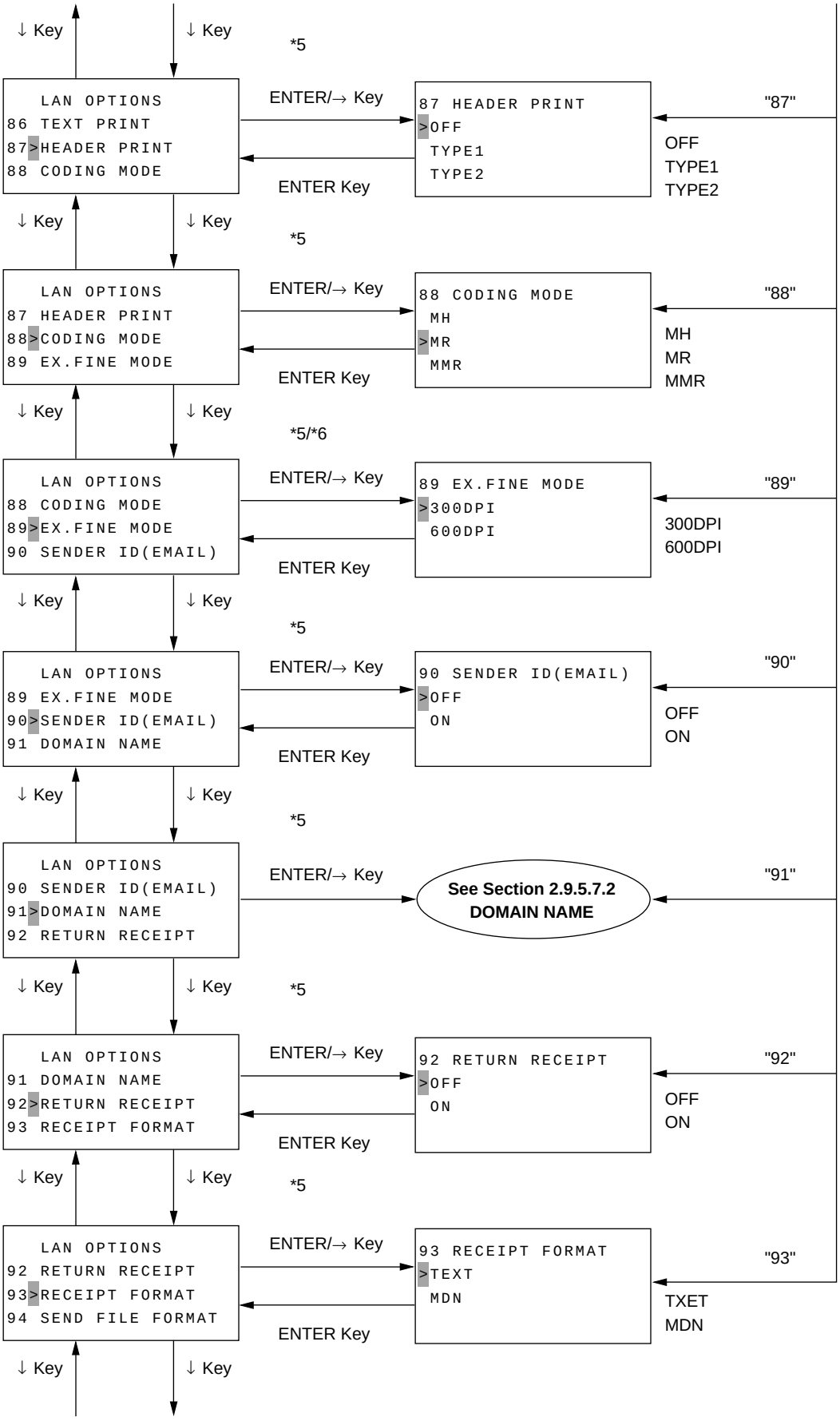
2.9.5.7 LAN Options

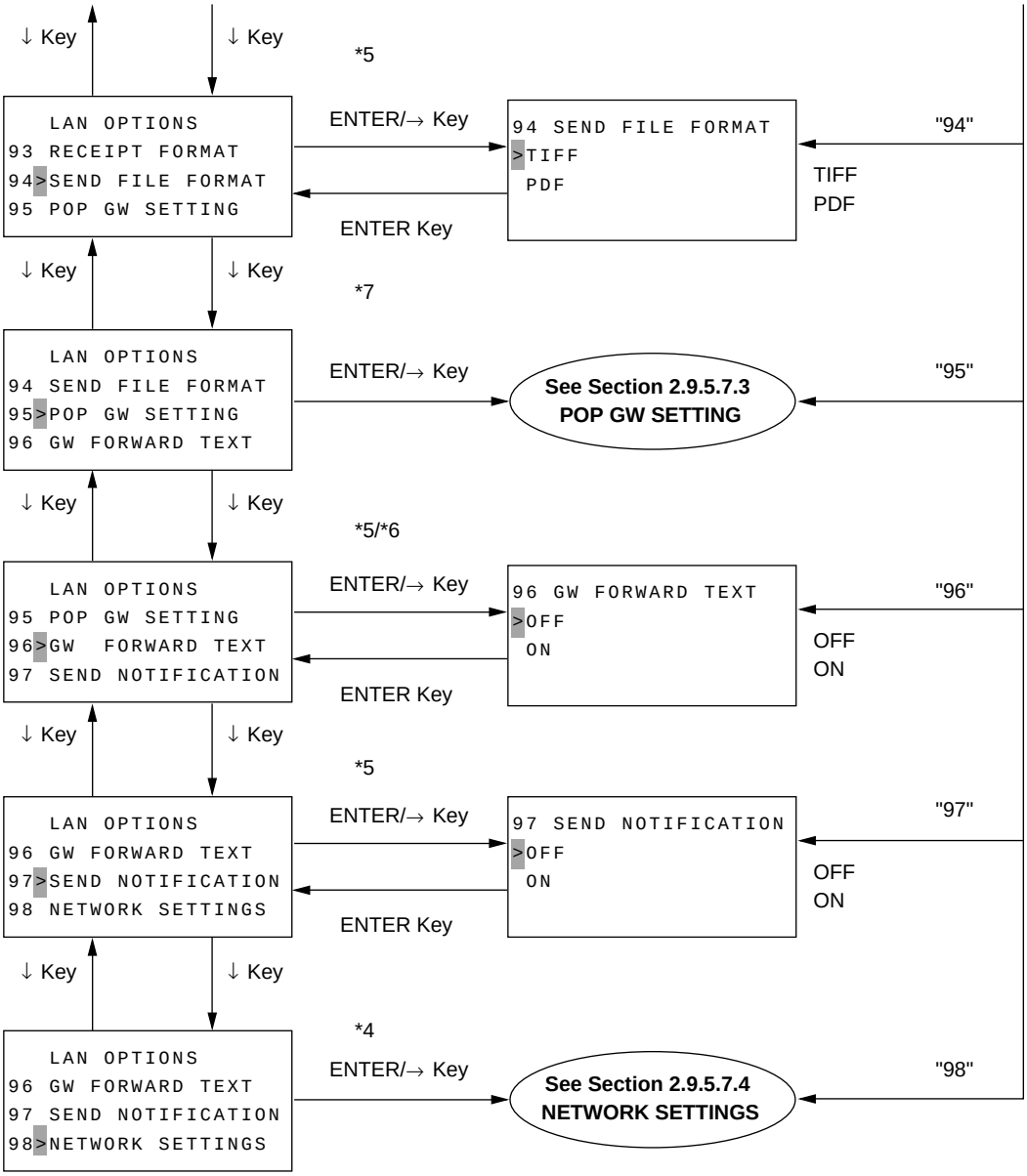
The kinds of setting are:

80:	Auto Tray SW.	(OFF/ON)
81:	Paper Size Check	(OFF/ON)
82:	LAN Print T.O.	(5SEC/30SEC/5MIN)
83:	POP Interval	(0 to 60) (Intervals of 1 min)
84:	DELETE POP MSG.	(OFF/TYPE1/TYPE2)
85:	Time Between GMT	(-12/-11/-10/-9/-8/-7/-6/-5/-4/-3/-2/-1/-/+1/+2/+3/+4/+5/+6/+7/+8/+9/+10/+11/+12)
86:	Text Print	(OFF/ON)
87:	Header Print	(OFF/TYPE1/TYPE2)
88:	Coding Mode	(MH/MR/MMR)
89:	EX.FINE MODE	(300DPI/600DPI)
90:	Sender ID (EMAIL)	(OFF/ON)
91:	DOMAIN Name	(See Section 2.9.5.7.2)
92:	Return Receipt	(OFF/ON)
93:	Receipt Format	(TEXT/MDN)
94:	Send File Format	(TIFF/PDF)
95:	POP GW Setting	(See Section 2.9.5.7.3)
96:	GW Forward Text	(ON/OFF)
97:	Send Notification	(ON/OFF)
98:	Network Setting	(See Section 2.9.5.7.4)

See Table 2.9.5.7 LAN Options for the detail.

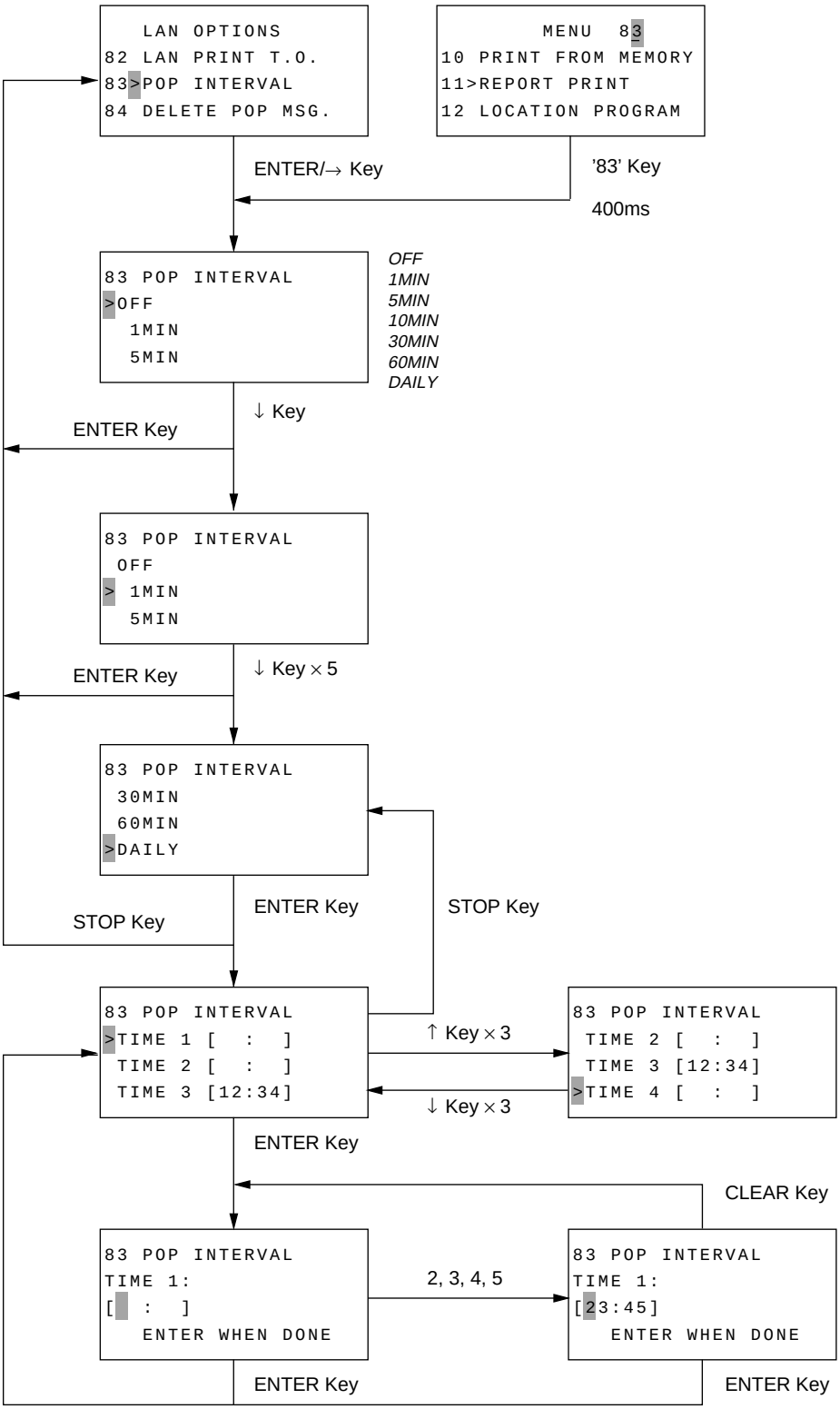

<Speed Access>
SETUP
5 INCOMING OPTIONS
6 REPORT OPTIONS
7>LAN OPTIONS
MENU XX
10 PRINT FROM MEMORY
11>REPORT PRINT
12 LOCATION PROGRAM
*1/*2
ENTER/→ Key
400ms
LAN OPTIONS
80>AUTO TRAY SW.
81 PAPER SIZE CHECK
82 LAN PRINT T.O.
ENTER/→ Key
80 AUTO TRAY SW.
OFF
>ON
"80"
OFF
ON
ENTER Key
↓ Key
↓ Key
LAN OPTIONS
80 AUTO TRAY SW.
81>PAPER SIZE CHECK
82 LAN PRINT T.O.
ENTER/→ Key
81 PAPER SIZE CHECK
>OFF
ON
"81"
OFF
ON
ENTER Key
↓ Key
↓ Key
LAN OPTIONS
81 PAPER SIZE CHECK
82>LAN PRINT T.O.
83 POP INTERVAL
ENTER/→ Key
82 LAN PRINT T.O.
> 5SEC
30SEC
5MIN
"82"
5SEC
30SEC
5MIN
ENTER Key
↓ Key
↓ Key
*5
LAN OPTIONS
82 LAN PRINT T.O.
83>POP INTERVAL
84 DELETE POP MSG.
ENTER/→ Key
See Section 2.9.5.7.1
POP INTERVAL
"83"
↓ Key
↓ Key
*5
LAN OPTIONS
83 POP INTERVAL
84>DELETE POP MSG.
85 TIME BETWEEN GMT
ENTER/→ Key
84 DELETE POP MSG.
>OFF
TYPE1
TYPE2
"84"
OFF
TYPE1
TYPE2
ENTER Key
↓ Key
↓ Key
*5
LAN OPTIONS
84 RECEIVED MSG.
85>TIME BETWEEN GMT
86 TEXT PRINT
ENTER/→ Key
85 TIME BETWEEN GMT
-1
> 0
+1
"85"
-12/-11/-10/-9/-8/-7/
-6/-5/-4/-3/-2/-1/0/+1/
+2/+3/+4/+5/+6/+7/
+8/+9/+10/+11/+12
ENTER Key
↓ Key
↓ Key
*5
LAN OPTIONS
85 TIME BETWEEN GMT
86>TEXT PRINT
87 HEADER PRINT
ENTER/→ Key
86 TEXT PRINT
>OFF
ON
"86"
OFF
ON
ENTER Key
↓ Key
↓ Key


↓ Key
↓ Key
*5
LAN OPTIONS
86 TEXT PRINT
87>HEADER PRINT
88 CODING MODE
ENTER/→ Key
ENTER Key
87 HEADER PRINT
>OFF
TYPE1
TYPE2
"87"
OFF
TYPE1
TYPE2
↓ Key
↓ Key
*5
LAN OPTIONS
87 HEADER PRINT
88>CODING MODE
89 EX.FINE MODE
ENTER/→ Key
ENTER Key
88 CODING MODE
MH
>MR
MMR
"88"
MH
MR
MMR
↓ Key
↓ Key
*5/*6
LAN OPTIONS
88 CODING MODE
89>EX.FINE MODE
90 SENDER ID(EMAIL)
ENTER/→ Key
ENTER Key
89 EX.FINE MODE
>300DPI
600DPI
"89"
300DPI
600DPI
↓ Key
↓ Key
*5
LAN OPTIONS
89 EX.FINE MODE
90>SENDER ID(EMAIL)
91 DOMAIN NAME
ENTER/→ Key
ENTER Key
90 SENDER ID(EMAIL)
>OFF
ON
"90"
OFF
ON
↓ Key
↓ Key
*5
LAN OPTIONS
90 SENDER ID(EMAIL)
91>DOMAIN NAME
92 RETURN RECEIPT
ENTER/→ Key
See Section 2.9.5.7.2
DOMAIN NAME
"91"
↓ Key
↓ Key
*5
LAN OPTIONS
91 DOMAIN NAME
92>RETURN RECEIPT
93 RECEIPT FORMAT
ENTER/→ Key
ENTER Key
92 RETURN RECEIPT
>OFF
ON
"92"
OFF
ON
↓ Key
↓ Key
*5
LAN OPTIONS
92 RETURN RECEIPT
93>RECEIPT FORMAT
94 SEND FILE FORMAT
ENTER/→ Key
ENTER Key
93 RECEIPT FORMAT
>TEXT
MDN
"93"
TXET
MDN
↓ Key
↓ Key



*1 This transition is available only when there is LAN option. (If there isn' t any, then "7>LAN OPTIONS" will not be displayed.)
*2 When HSP error occurred or NIC initialization is proceeding, then "FUNC.NOT AVAIL." will be displayed for 3 sec. with pressing ENTER/→ key.
*4 If HSP error or anything occurred, then "FUNC.NOT AVAIL." will be displayed for 3 sec. with pressing ENTER/→ key.
*5 This transition is available only when NIC TYPE2 is loaded in the software. If there isn't any, then items will not be displayed. (Only 80,81,82,98 are in the selections.)
*6 This setting is available only when 8MB memory is loaded in the software.
*7 This setting is available only when NIC TYPE2 is loaded in the software & also CATEWAY SERVICE = ON.

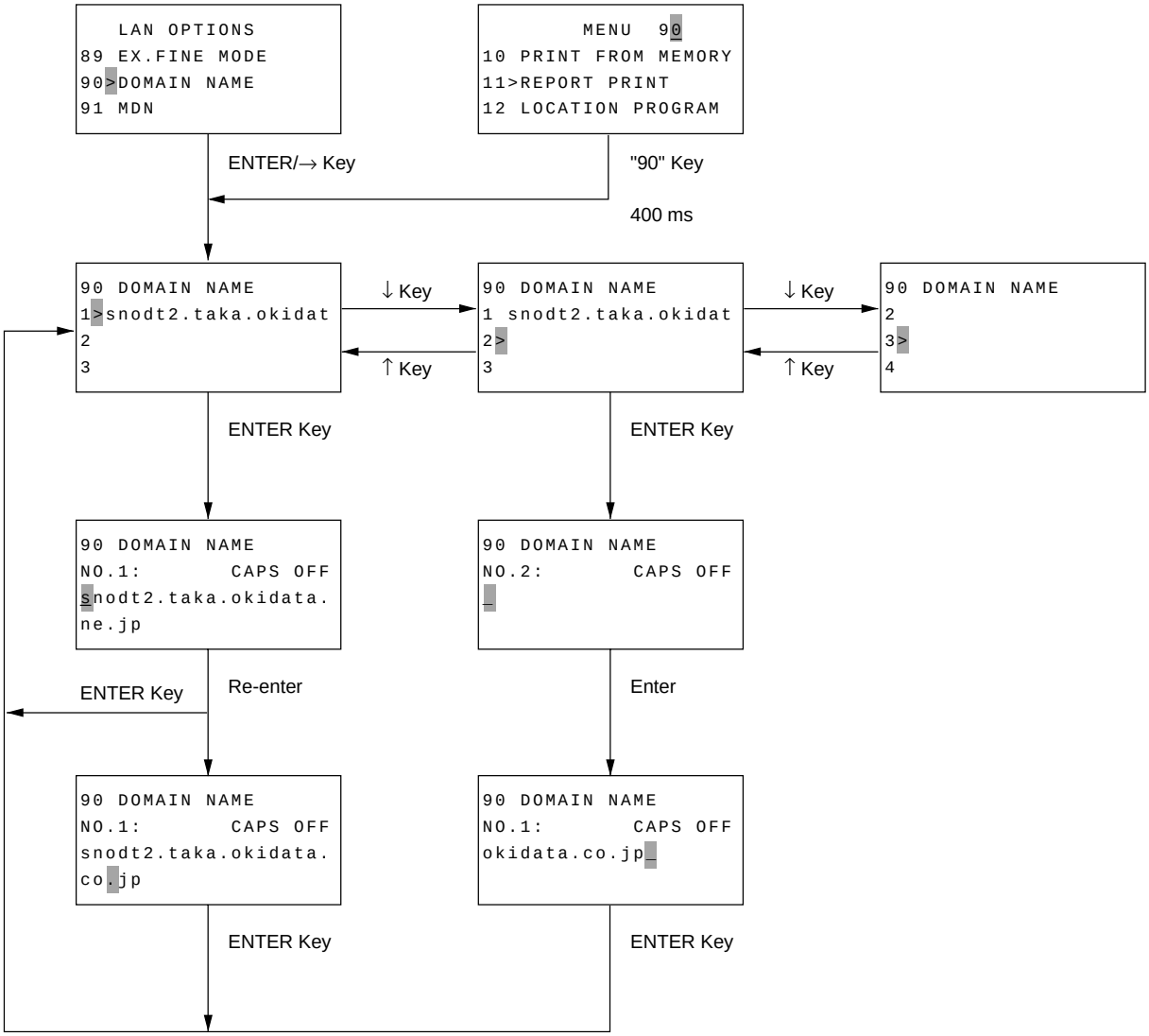
2.9.5.7.1 POP Interval



1 Even if the setting is DELAY, but POP TIME registration has not been done, then the auto POP receiving operation will not start. (The situation is the same to the one of OFF setting.)

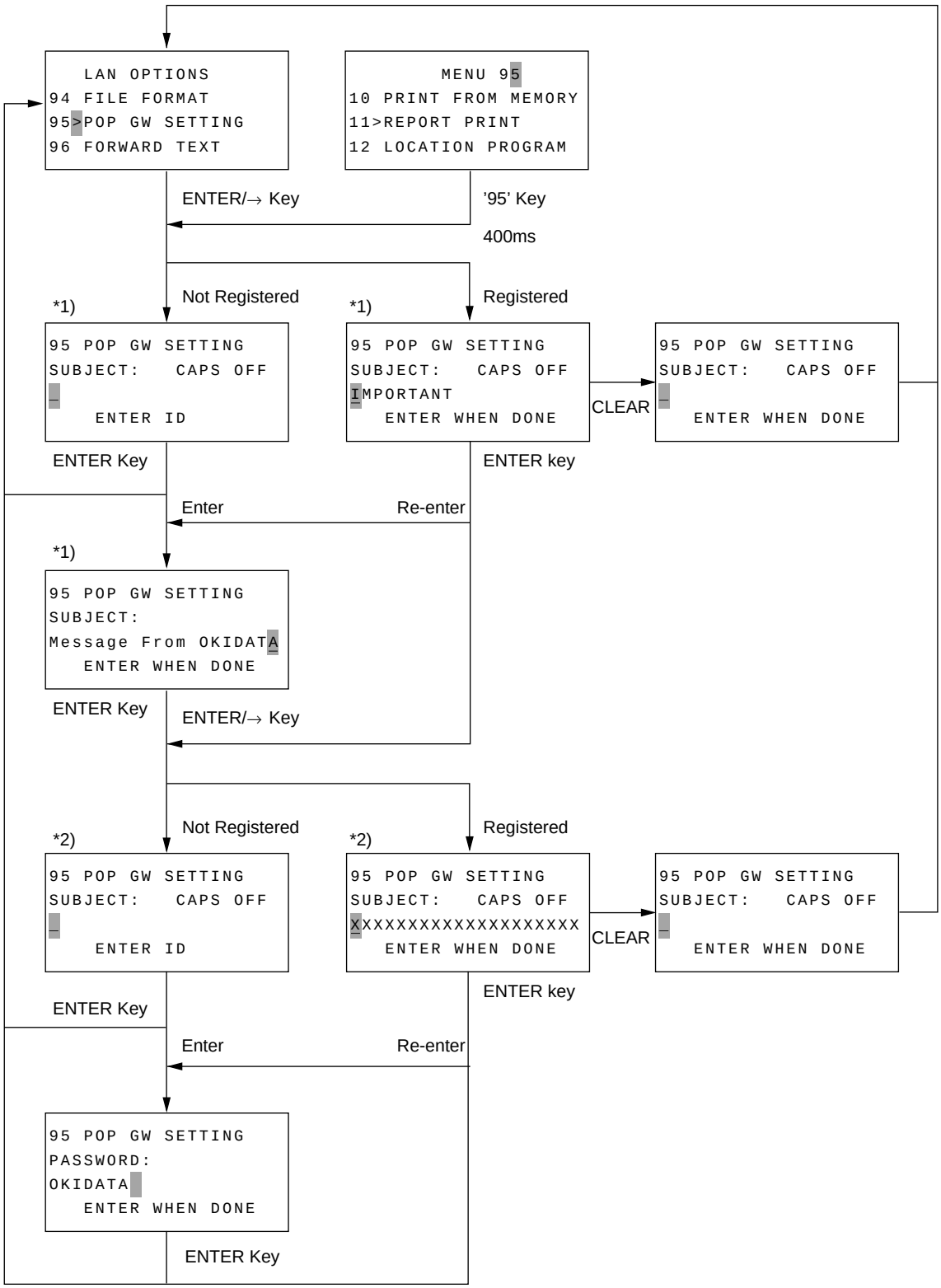
* After POP TIME is registered, even when there is a change from DAILY to other settings, the registered POP TIME will be not eliminated.

2.9.5.7.2 DOMAIN Name



* Five (5) types of DOMAIN NAME may be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

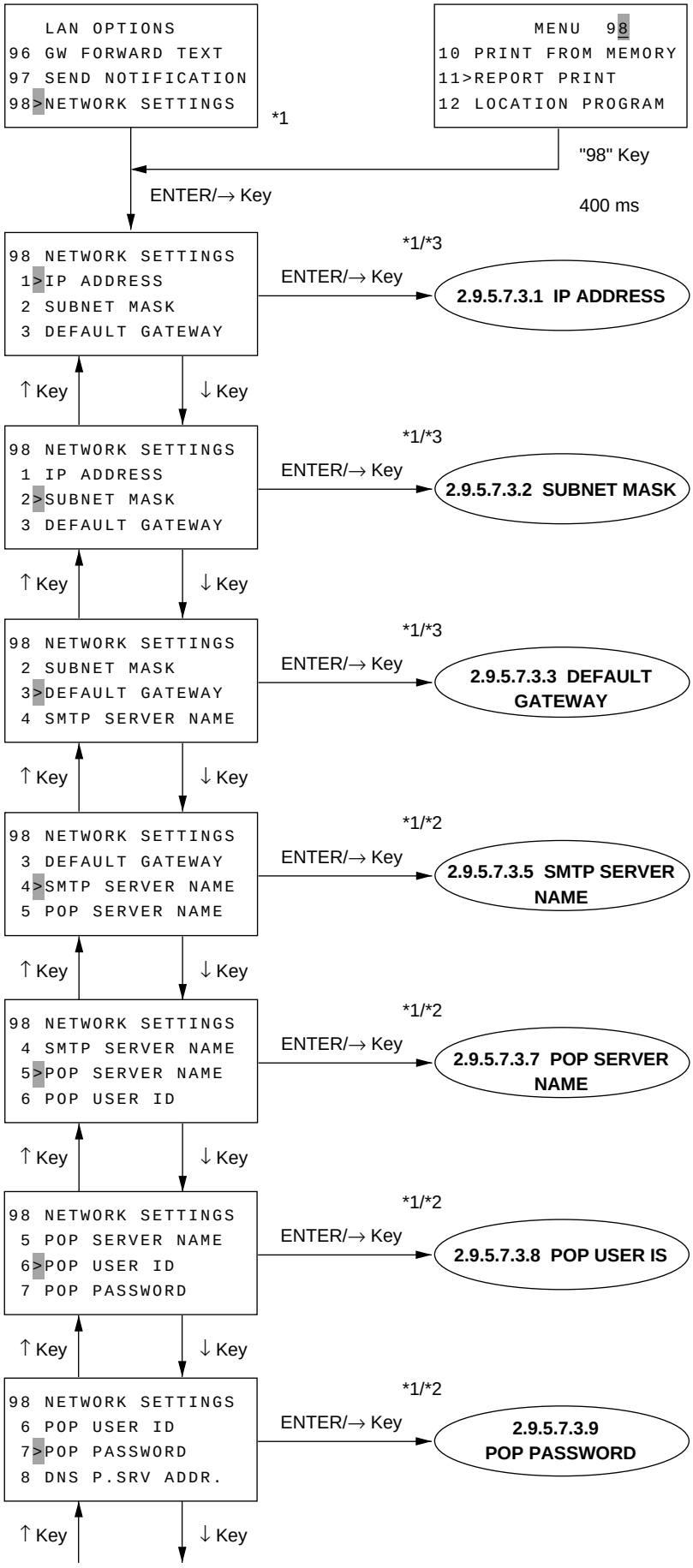
2.9.5.7.3 POP GW Setting

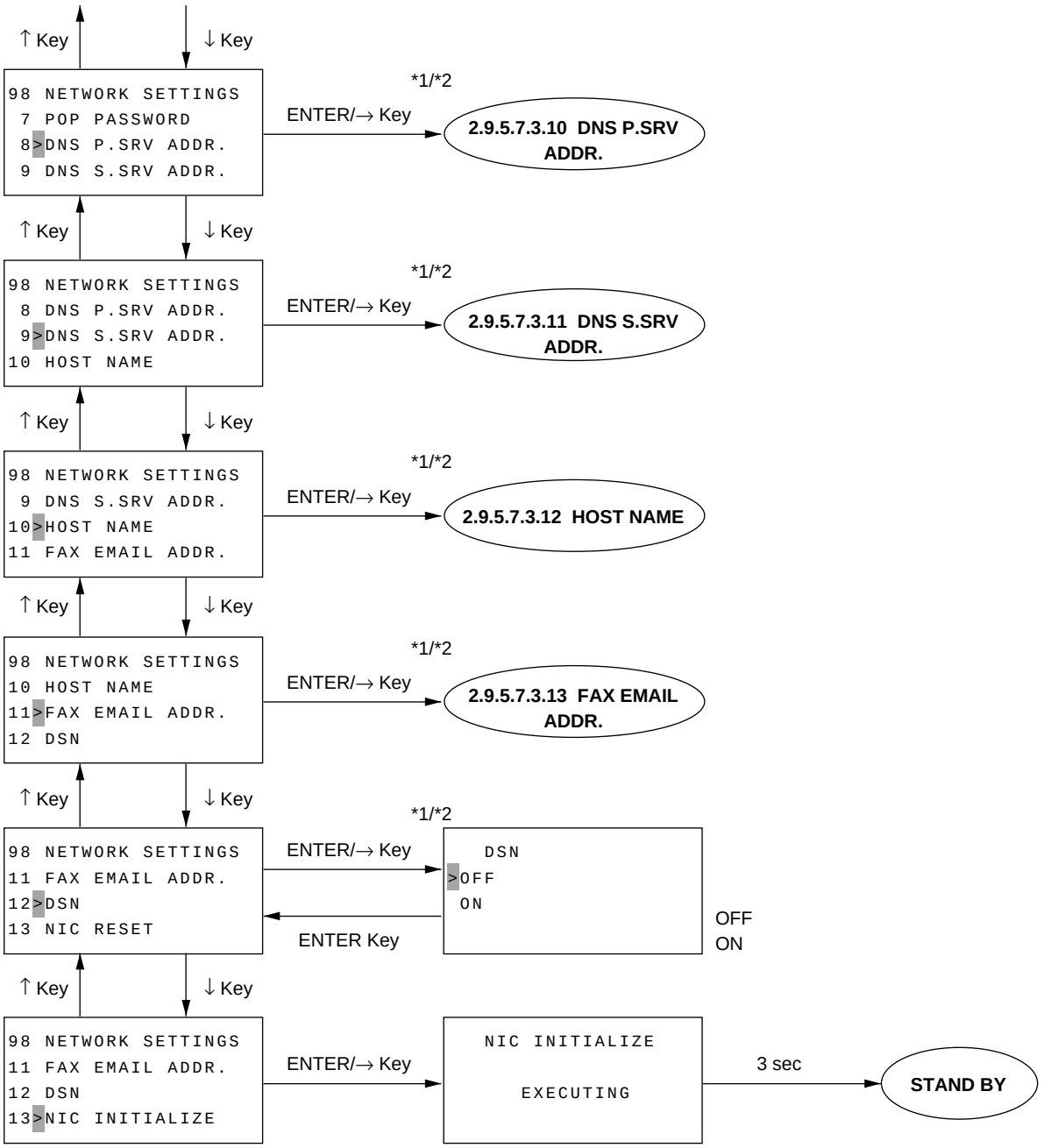


*1) SUBJECT max. number of registered digit 20
*2) PASSWORD max. number of registered digit 20

* Capital letter and small letter are available. (CAPS OFF is the default.) Umlaut and Norwegian character are invalid.
* The initial space will be suppressed. The space in the middle will be treated as it was entered.
* Both of two registrations of SUBJECT/PASSWORD are necessary. If either one of them is cleared, then the other one will be cleared, too.

2.9.5.7.4 Network Settings



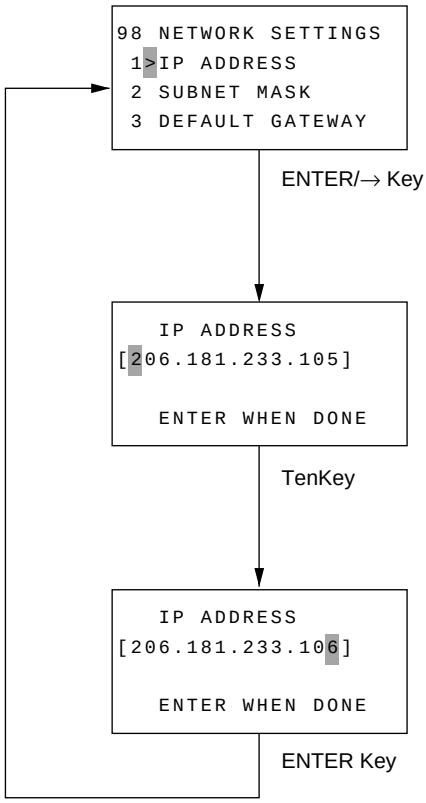


*1: If HSP is in error, etc., "FUNC. NOT AVAIL." will be displayed for 3 seconds when ENTER/→ key is pressed.
*2: Transition enabled only if NIC TYPE2 is installed. No item will be displayed if TYPE2 is not installed.
*3: Certain NIC card may be not supported. In such a case, no item will be displayed.

* SPEED ACCESS to each item of NETWORK SETTINGS disabled. Each item number is variable according to the display condition of the item concerned.

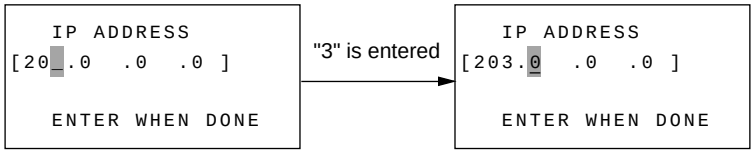
2.9.5.7.4.1 IP Address

This function is used to display the IP address from the NIC, confirm the data from the terminal, and change settings.

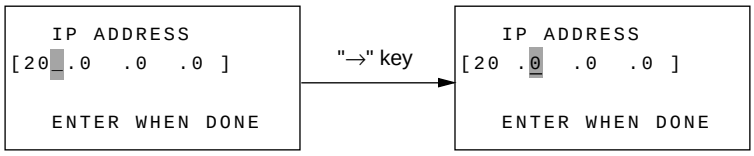


Entering an IP address value

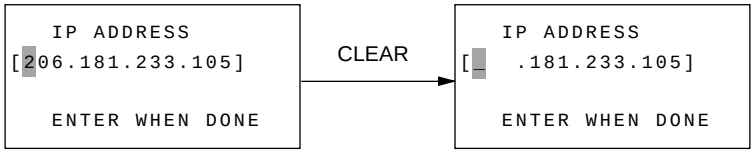
1) Setting data is received from NIC. When HSP error has occured during the data reception, the machine returns to the "LAN OPTIONS" menu screen after "FUNC. NOT AVAIL" is displayed during 3 seconds.
2) When three digits of the network ID or host ID have been entered, the blinking cursor automatically moves to the position following the dot.



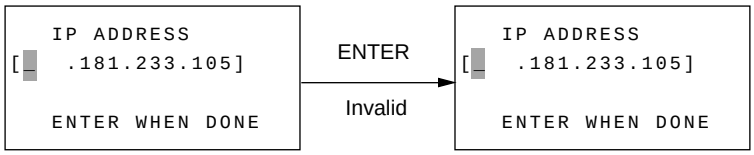
3) When three digits have not been entered, the blinking cursor position moves to the next digit input by the pressing the SHIFT RIGHT key.



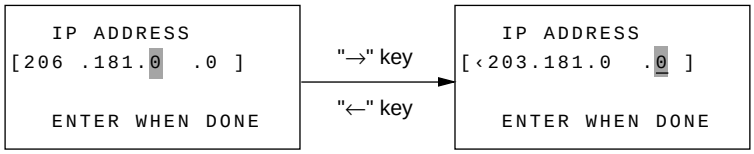
4) When the CLEAR key is pressed, a maximum of three characters are erased from the blinking cursor position to the dot position.



5) The ENTER key is rejected if the numeric entry space delimited by dot is empty.

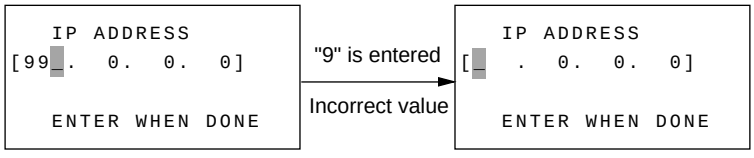


6) The right-left shift key is valid during input.



*The cursor cannot be moved over the numeric between dots.

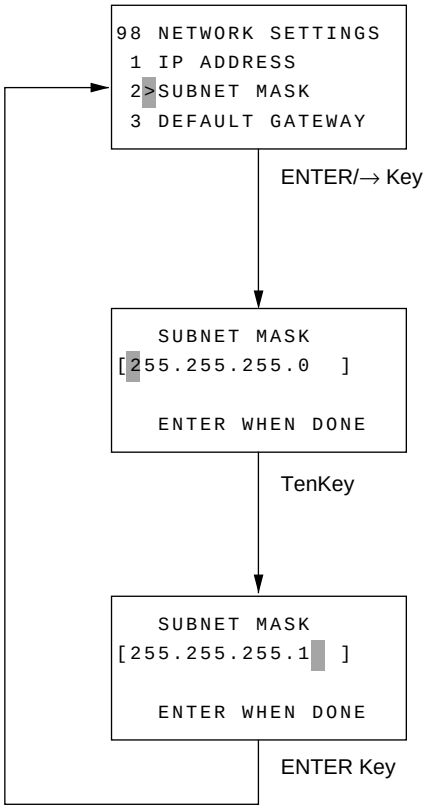
7) Whether the entered value is correct is identified when numeric entry between dots is determined as shown below.
   • 3-digit entry: When 3 digits are entered
   • Less than 3 digits: When the SHIFT key is pressed



8) The value that can be entered ranges from 0 to 255 but the suitable value depends on network limitation, etc.

2.9.5.7.4.2 Subnet Mask

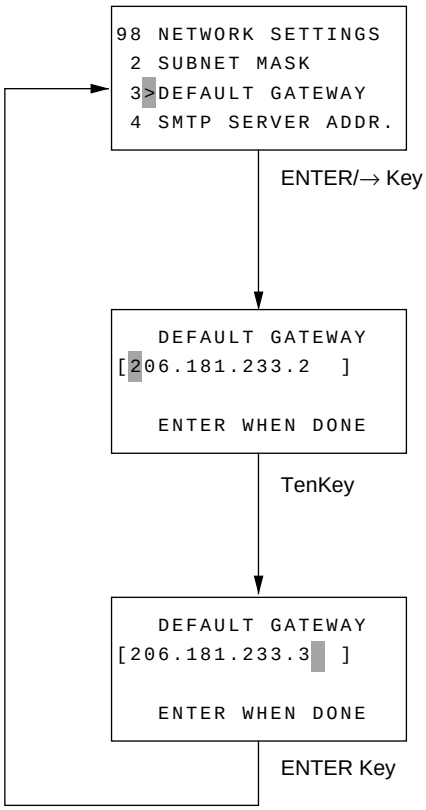
This function is used to display the sub net address from NIC, confirm the data from the terminal, and change settings.



Entering a subnet mask value Same as Entering an IP address value

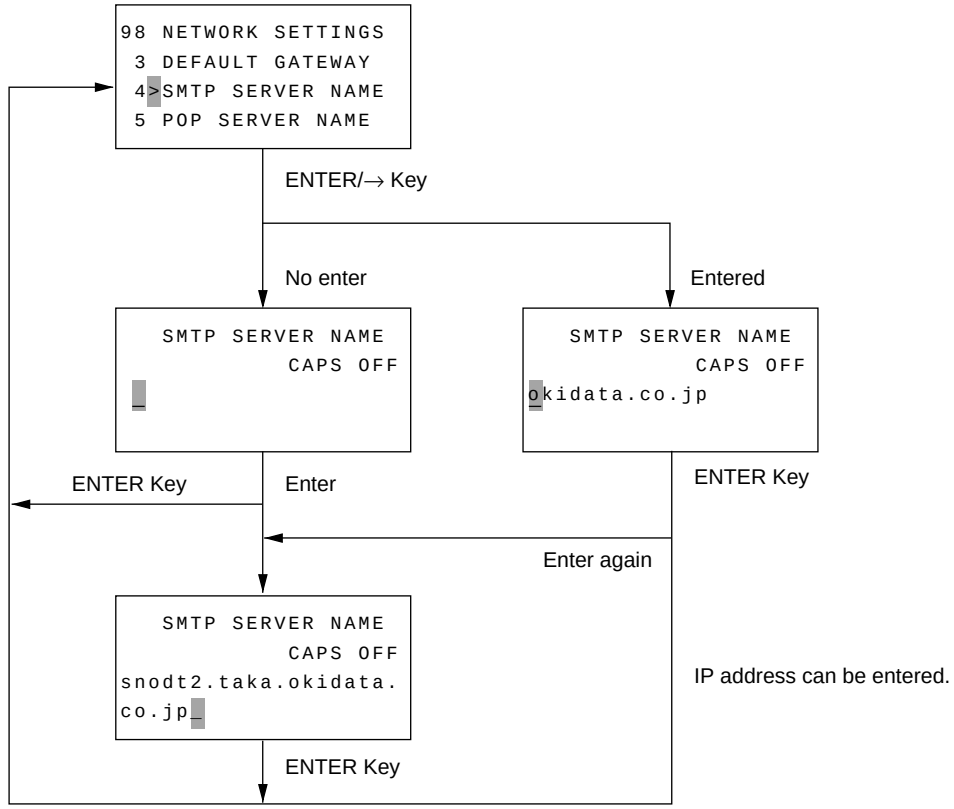
2.9.5.7.4.3 Default Gateway

This function is used to display the gateway address from NIC, confirm the data from the terminal, and change settings (NIC option setting).



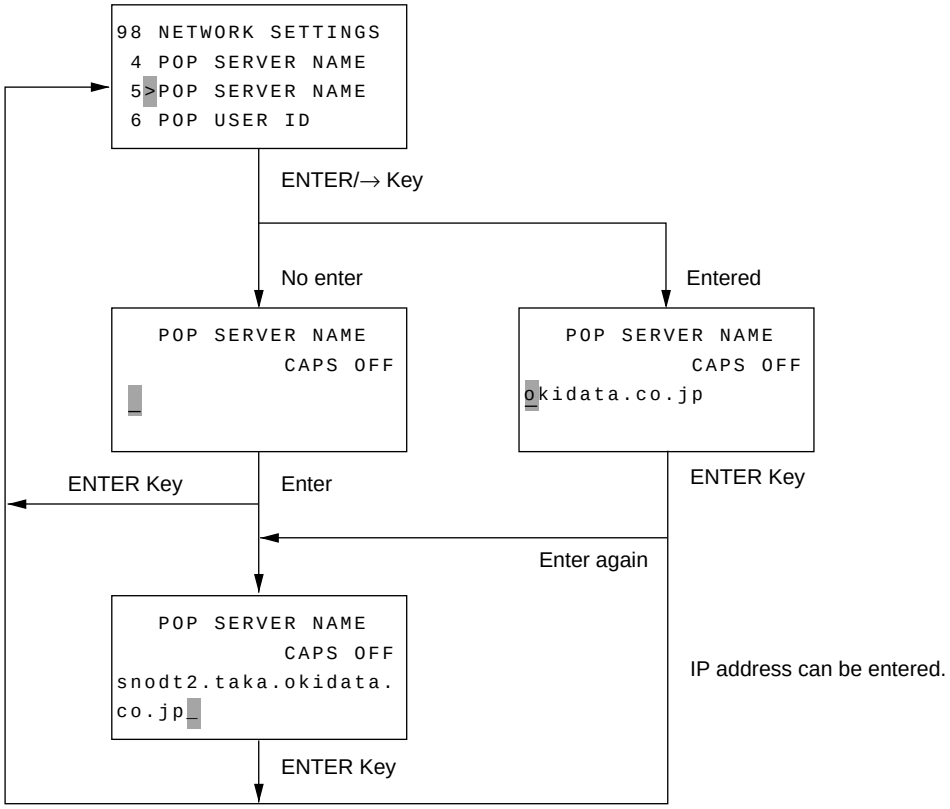
Entering a gateway value
Same as Entering an IP address value

2.9.5.7.4.4 SMTP Server Name



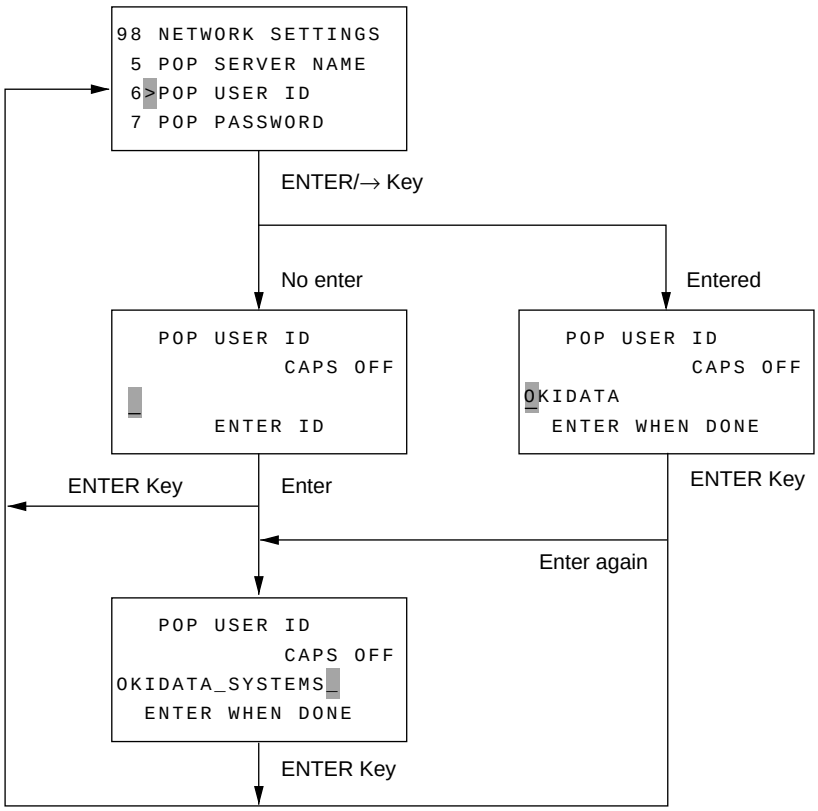
* SMTP SERVER NAME can be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.5.7.4.5 POP Server Name



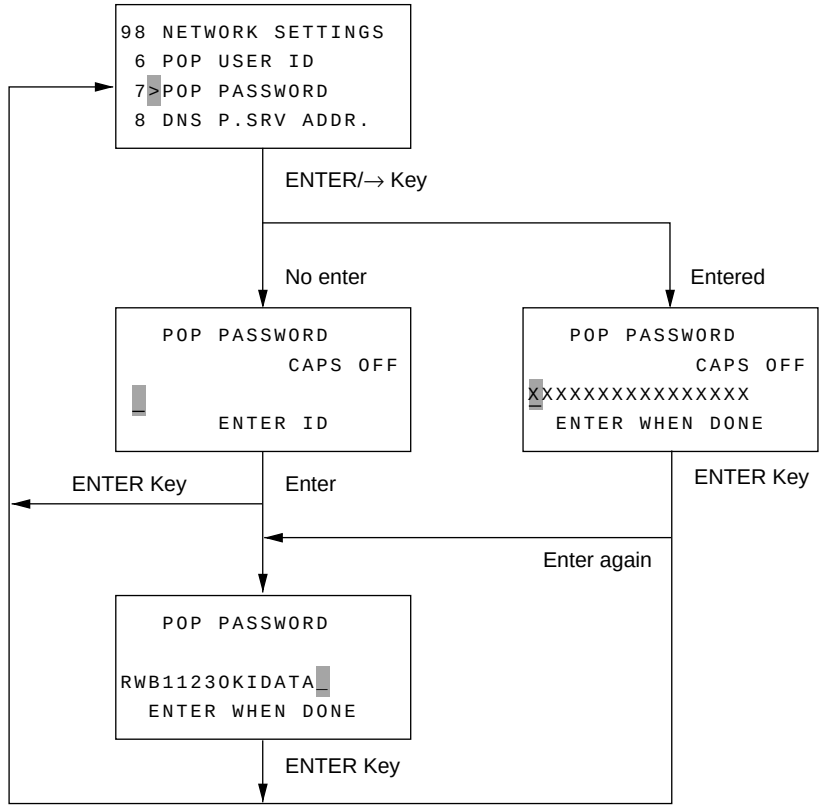
* POP SERVER NAME can be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.5.7.4.6 POP User ID



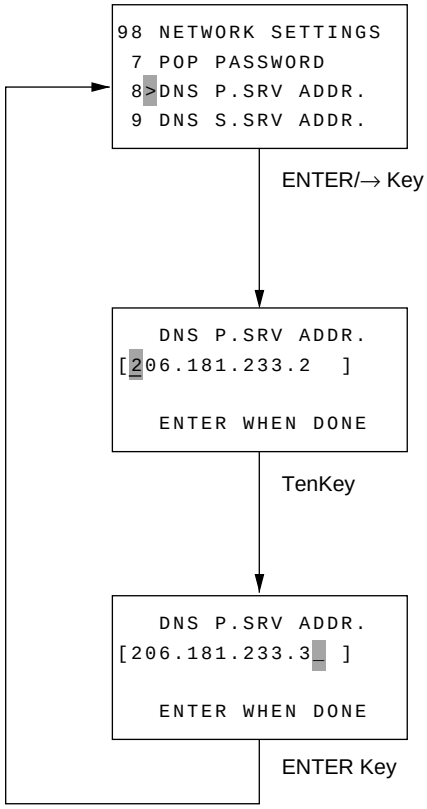
* POP USER ID can be registered in 16 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.5.7.4.7 POP Password



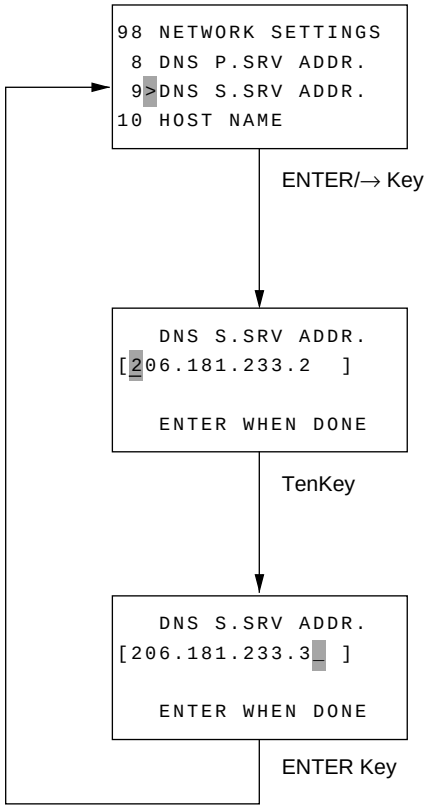
* POP PASSWORD can be registered in 16 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.5.7.4.8 DNS P.SRV Addr.



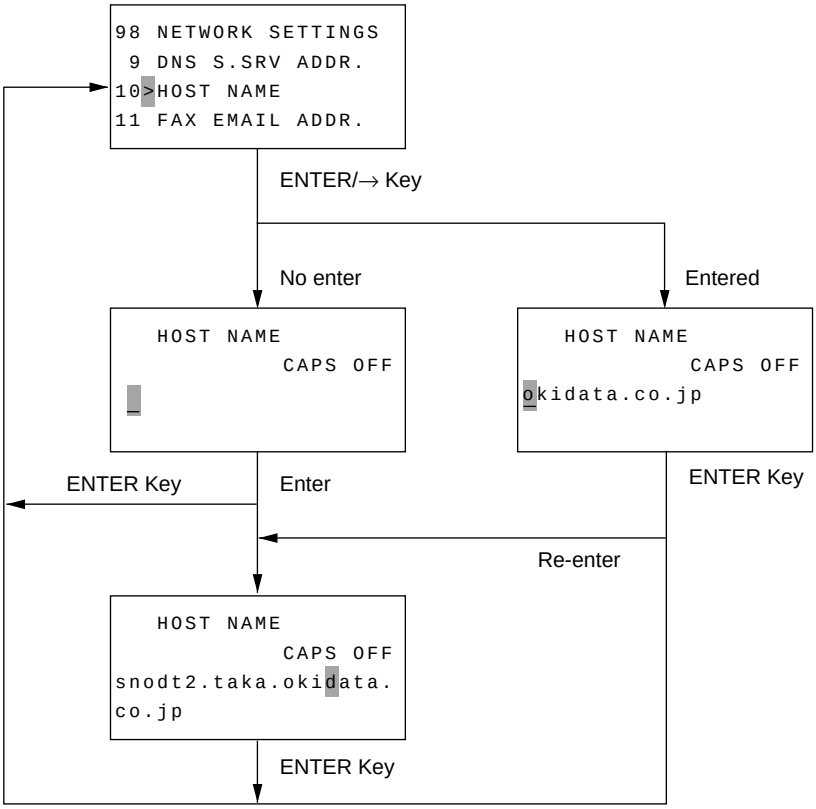
Entering DNS P.SRV ADDR. value
Same as Entering an IP address value

2.9.5.7.4.9 DNS S.SRV Addr.



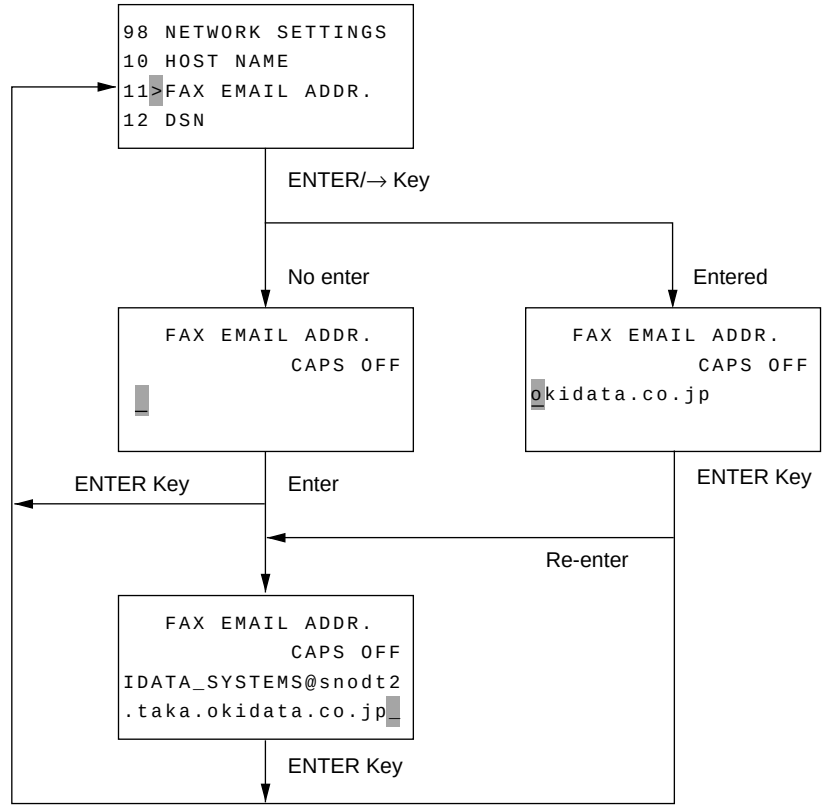
Entering DNS S.SRV ADDR. value
Same as Entering an IP address value

2.9.5.7.4.10 Host Name



* HOST NAME can be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

2.9.5.7.4.11 Fax Email Addr.



* FAX EMAIL ADDR. can be registered in 64 digits maximum.
* Uppercase and lowercase characters can be entered (CAPS OFF by default).

Table 2.9.5.7 LAN Options (1/6)

Setting values are defined for each default type.
The settings listed below can be made only when a LAN option is installed. When it is not installed, none of LAN-related setup items can be selected. None of them can be selected during NIC initialization. (FUNC NOT AVAIL.)

No.	Item	Specifications
80	Auto Tray SW.	Determine whether the current tray is automatically switched to another tray when the current tray runs out of paper in the LAN print mode. This setting can be made only when the second tray is installed. 1) Setting values ON (Switched)/OFF (Not switched) * Setting enabled when NIC TYPE 1/TYPE 2 is installed.
81	Paper Size Check	Determine whether the set paper size is to be checked against the host-specified paper size in the LAN print mode. 1) Setting values ON (Checked)/OFF (Not checked) * If the two paper sizes do not match, the machine takes the following action: ON: Issues a paper request directly before starting printing and detects the paper size and jam after starting printing. OFF: Does not issues a paper request directly before starting printing nor detect the paper size and jam after starting printing. * Setting enabled when NIC TYPE 1/TYPE 2 is installed.
82	LAN Print T.O.	Set the time from job start to job end during which image data storage in the image memory (from LAN) should be completed. If this time is expired, LAN printing will be interrupted. 1) Setting values 5 sec/30 sec/5 min selectable * Setting enabled when NIC TYPE 1/TYPE 2 is installed.
83	POP INTERNATIONAL	Setting POP receiving action interval 1) Setting Values OFF/1MIN/5MIN/10MIN/30MIN/60MIN/DAILY * When the DAILY setting is selected, POP TIME (receiving action time) should be set. (max. registered number of times : 4 kinds) * If the setting is DAILY, but there is no registered POP TIME, then auto POP receiving action will not be done. (The action is the same to the OFF setting.) * After POP TIME is registered, if the setting is changed from DAILY to another, the registered POP TIME will be not eliminated. * This setting is available only when there is NIC TYPE2 (T.37 available) is installed.

Table 2.9.5.7 LAN Options (2/6)

No.	Item	Specifications
84	DELETE POP MSG.	Sets up whether to delete received mail from the mail server. 1) Setting value OFF/TYPE1/TYPE2 OFF: Not delete TYPE1: Delete only printable mail TYPE2: Delete all * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
85	TIME BETWEEN GMT	Sets up time difference from Greenwich Mean Time. Used for creating a header for email. 1) Setting value -12 to +12 (intervals of 1 hour) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
86	TEXT PRINT	Sets up whether to print the text in the Email. 1) Setting value ON (Print text)/ OFF (Not print text) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
87	HEADER PRINT	Sets up printing of header attached to Email. 1) Setting value OFF/TYPE1/TYPE2 OFF: Not print TYPE1: Print all TYPE2: Print SUBJECT/FORM/TO only * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
88	CODING MODE	Sets up the transmission compression mode. Sets up the coding mode of images to attach to Email. 1) Setting value MH/MR/MMR * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
89	EX.FINE MODE	Sets up selection of high resolution mode (EX.FINE) with the reading for Email. 1) Setting value 300 dpi/600 dpi * Setting enabled when NIC TYPE2 (IFAX enabled) is installed and that a memory of 8MB is installed.
90	SENDER ID(EMAIL)	Sets up whether to attach Sender ID when transmitting IFAX. 1) Setting value ON (Attach sender ID)/ OFF (Do not attach sender ID) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.

Table 2.9.5.7 LAN Options (3/6)

No.	Item	Specifications
91	DOMAIN NAME	Registers receivable domain names (5 types). Receiving operation follows only when the Email address coincides with any one of the domain names registered to this setting. If the domain name does not coincide, the Email will be regarded as non-receivable by FAX and will be retained with the mail server without reception. 1) Domain name registration number of digits 64 digits (Entry-enabled characters are similar to those of Email Address.) * Setting enabled only when NIC TYPE2 (T.37 available) is installed, & GATEWAY SERVICE = ON
92	RETURN RECEIPT	Sets up whether to send confirmation for reading (MDN). 1) Setting value ON (Reading to be confirmed) /OFF (Reading not to be confirmed) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
93	RECEIPT FORMAT	This setting is to select the format of Return Receipt Confirmation (MDN). 1) Setting value TEXT/MDN TEXT : the format that the normal mailer can be seen in. MDN : the format following to the RFC that FX-056VP/176VP is supporting currently * This setting is available only when there is NIC TYPE2 (T.37 available) is installed.
94	SEND FILE FORMAT	This setting is to decide either of TIFF/PDF will be used to send by Email, after the manuscripts are read. 1) Setting value TIFF/PDF * This setting is available only when there is NIC TYPE2 (T.37 available) is installed.
95	POP GW SETTING	This setting is to select SUBJECT or PASSWORD of the subject of POP GATEWAY SERVICE. 1) Number of registered SUBJECT 20 digits (available characters are the same to the Email ADDRESS) 2) Number of registered PASSWORD 20 digits (available characters are the same to the Email ADDRESS) * This setting is available only when there is NIC TYPE2 (T.37 available) is installed & GATEWAY SERVICE = ON. * Both SUBJECT/PASSWORD are necessary to register. If either one is cleared then the other one will be cleared, too. * The initial space will be suppressed. The space in the middle will be treated as it was entered.

Table 2.9.5.7 LAN Options (4/6)

No.	Item	Specifications
96	GW FORWARD TEXT	This setting is to decide if the TEXT will be forwarded by GATE-WAY service (forwarding) or not. 1) Setting Values ON (to forward) / OFF (not to forward) * The setting here is available only when NIC TYPE2 (T.37 available) is installed.
97	SEND NOTIFICATION	This setting is to decide if the message (Main body) will be attached or not when Emails are sent. 1) Setting Values ON (attached) / OFF (not attached) * The setting here is available only when NIC TYPE2 (T.37 available) is installed.
98	NETWORK SETTINGS	Sets up NIC data. Setting will be made for individual items after selecting this setting. 1) Set item (Set content, conditions, etc. Details to follow later.) 1: IP ADDRESS 2: SUBNET MASK 3: DEFAULT GATEWAY 4: SMTP SERVER NAME 5: POP SERVER NAME 6: POP USER ID 7: POP PASSWORD 8: DNS P.SRV ADDR. 9: DNS S.SRV ADDR 10: HOST NAME 11: FAX EMAIL ADDR. 12: DSN 13: NIC INITIALIZE * Each setting is stored in NIC. (Data transfer to NIC required when changing the content of setting.) * Items 1 to 3 may be set up when NIC TYPE1 is installed, and 1 to 14 when TYPE2 is installed. * Setting disabled when HSP error or initializing NIC. * This setting operation cannot be selected when HSP error or initializing NIC (FUNC NOT AVAIL.) * Speed access to each set item not allowed.

Table 2.9.5.7 LAN Options (5/6)

No.	Item	Specifications
	1: IP ADDRESS	Display the IP address from the NIC, check the data from the terminal, and change the setting. 1) Setting values 32 bits are divided into four 8-bit decimal values for setting. The decimal values are separated by dots as shown below. [206.181.233.105] * Setting ebabled when NIC TYPE1/TYPE2 is installed. * This setting cannot be made when not supported by NIC card.
	2: SUBNET MASK	Display the subnet address from the NIC, check the data from the terminal, and change the setting. 1) Setting values 32 bits are divided into four 8-bit decimal values for setting. The decimal values are separated by dots as shown below. [207.255.255.0] * Setting ebabled when NIC TYPE1/TYPE2 is installed. * This setting cannot be made when not supported by NIC card.
	3: DEFAULT GATEWAY	Display the gateway address from the NIC, check the data from the terminal, and change the setting. 1) Setting values 32 bits are divided into four 8-bit decimal values for setting. The decimal values are separated by dots as shown below. [206.181.233.2] * Setting ebabled when NIC TYPE1/TYPE2 is installed. * This setting cannot be made when not supported by NIC card.
	4: SMTP SERVER NAME	Registers SMTP MAIL SERVER NAME. 1) SMTP MAIL SERVER name registration number of digits 64 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
	5: POP SERVER NAME	Registers POP3 MAIL SERVER NAM. 1) POP3 MAIL SERVER name registration number of digits 64 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed
	6: POP USER ID	Registers account (user ID) registered to POP3 MAIL SERVER. 1) POP3 USER ID registration number of digit 16 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.

Table 2.9.5.7 LAN Options (6/6)

No.	Item	Specifications
	7: POP PASSWORD	Registers password for using POP3 MAIL SERVER. 1) POP3 PASSWORD registration number of digit 16 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed
	8: DNS P.SRV ADDR.	Sets IP address of DNS SERVER (PRIMARY) to use. 1) Setting value To be set up with four decimals of 8 bits each divided from 32 bits. Each decimal is partitioned with a dot as shown below: [206.181.233.105] * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
	9: DNS S.SRV ADDR.	Sets IP address of DNS SERVER (SECONDARY) to use. 1) Setting value To be set up with four decimals of 8 bits each divided from 32 bits. Each decimal is partitioned with a dot as shown below: [206.181.233.105] * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
	10: HOST NAME	Registers the host name of own machine. 1) Host Name registration number of digits 64 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed
	11: FAX EMAIL ADDR.	Registers Email address of own machine. 1) Email Address of own machine registration number of digits 64 digits (Input-enabled characters are same as Email Address) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed
	12: DSN	Sets up whether to send request for DSN (Arrival confirmation) to NIC server. 1) Setting value ON (Confirm arrival) / OFF (Not confirm arrival) * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.
	13: NIC INITIALIZE	Reset the NIC. * Setting enabled only when NIC TYPE2 (IFAX enabled) is installed.

2.9.6 User Default Setting 1

No	Technical Setting Items	Setting Selection	1 ODA	2 LTA	3 E-INT	4 E-GER	5 E-FRE	6 O-AUS	7 O-NZL	8 O-SIN	9 O-HNG	10 L-AG	11 IRL	12 DEN	13 SWE	14 NOR	15 SUI	16 AUT	17 HOL	18 ITA	19 ESP	20 TWN	(21) Factory
	MACHINE SETTINGS																						
10	AUTO ANSWER MODE	FAX/TEL/T/F/TAD/MEM/PC/FWD	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX	FAX
11	MONITOR VOLUME	OFF/LOW / MID. / HIGH-MID. / HIGH	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	LOW	MID	MID	MID	HIGH	HIGH	MID	HIGH
12	BUZZER VOLUME	LOW / MID / HIGH	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	MID	LOW	MID	LOW	MID	MID	MID	HIGH	HIGH	MID	HIGH
13	USER LANGUAGE	LNG1 / LNG2	LNG1	LNG1	LNG1	LNG2	LNG2	LNG1	LNG1	LNG1	LNG1	LNG1	LNG1	LNG2	LNG2	LNG2	LNG2	LNG2	LNG2	LNG2	LNG2	LNG1	LNG1
14	REMOTE DIAGNOSIS	ON / OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
15	TX MODE DEFAULT	STANDARD / FINE / EXTRA FINE/ PHOTO NORMAL/DARK/LIGHT	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR	STD NOR
16	NO TONER MEM. RX	ON / OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	MEM. FULL SAVE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
18	INSTANT DIALING	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
19	DEPARTMENT CODE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
20	ECM FUNCTION	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
21	CLOSED NETWORK	OFF / TXRX / RX	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
22	TONER SAVE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
23	SENDER ID	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
24	WIDTH REDUCTION	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
25	1'ST PAPER SIZE	A4/LETTER/LEGAL13/LEGAL14/ EXEC./JIS-B5/A5/A6	LET	LET	A4	A4	A4	A4	A4	A4	A4	LET	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	LET
26	2'ND PAPER SIZE	A4/LETTER/LEGAL13/LEGAL14/ EXEC./JIS-B5/A5/A6	LET	LET	A4	A4	A4	A4	A4	A4	A4	LET	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	LET
27	POWER SAVE MODE	ON / OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
28	RELAY PRINT	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
29	600DPI FUNCTION	ON/OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
30	ISDN DIAL MODE	G4 Mode / G3 Mode	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4	G4
31	SPEECH RECEIVE	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
32	OPTION LINE TYPE	TX/RX/ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
33	BACKUP FILE TX	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	INCOMING OPTIONS																						
60	INCOMING RING	OFF / ON / DRC	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	ON	ON
61	REMOTE RECEIVE	OFF/00/11/22/..... /88/99/ ** / ##	OFF	OFF	OFF	OFF	OFF	OFF	**	OFF	OFF	OFF	OFF	**	11	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
62	T / F TIMER PRG.	20 sec / 35 sec	35	35	20	35	20	35	35	35	35	35	20	20	20	35	35	35	20	35	20	35	35
63	CONTINIOUS TONE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
64	PC / FAX SWITCH	ON / OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF
65	CNG COUNT	1 - 5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66	RING RESPONSE	1ring/5sec/10sec/15sec/20sec	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	1ring	5sec	1ring	1ring	1ring	1ring	1ring	1ring
67	DISTINCTIVE RING	OFF / ON (if DRC is avail.) / SET	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	REPORT OPTIONS																						
70	MCF(single-loc.)	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
71	MCF(multi-loc.)	ON / OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	ON	OFF
72	IMAGE IN MCF.	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
73	ERR.REPORT(MCF.)	ON / OFF	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	ON	ON	OFF

No	Technical Setting Items	Setting Selection	1 ODA	2 LTA	3 E-INT	4 E-GER	5 E-FRE	6 O-AUS	7 O-NZL	8 O-SIN	9 O-HNG	10 L-AG	11 IRL	12 DEN	13 SWE	14 NOR	15 SUI	16 AUT	17 HOL	18 ITA	19 ESP	20 TWN	(21) Factory
	LAN OPTIONS																						
80	AUTO TRAY SW.	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
81	PAPER SIZE CHECK	ON / OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
82	LAN PRINT T.O.	5SEC / 30SEC / 5MIN	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC	30SEC
83	POP INTERVAL	OFF / 1MIN / 5MIN / 10MIN / 30MIN / 60MIN / DAILY	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN	5MIN
84	DELETE POP MSG.	OFF / TYPE1 / TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2	TYPE2
85	TIME BETWEEN GMT	-12H/-11H/-10H/-9H/ ... /+9H/+10H/+11H/+12H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	TEXT PRINT	ON / OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
87	HEADER PRINT	OFF / TYPE1 / TYPE2	TYPE1	TYPE1	OFF	OFF	OFF	TYPE1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
88	CODING MODE	MH / MR / MMR	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH	MH
89	EX.FINE MODE	300DPI / 600DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI	300DPI
90	SENDER ID(EMAIL)	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
91	DOMAIN NAME	Domain Name	The outside of the object of the default settings.																				
92	RETURN RECEIPT	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
93	RECEIPT FORMAT	TEXT / MDN	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT	TEXT
94	SEND FILE FORMAT	TIFF / PDF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF	TIFF
95	POP GW SETTING	POP Gateway subject & password	The outside of the object of the default settings.																				
96	GW FORWORD TEXT	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
97	SEND NOTIFICATION	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
98	NETWORK SETTINGS		The outside of the object of the default settings. This setting reads the setting value of NIC card.																				
	1 IP ADDRESS																						
	2 SUBNET MASK																						
	3 DEFAULT GATEWAY																						
	4 SMTP SERVER NAME																						
	5 POP SERVER NAME																						
	6 POP USER ID																						
	7 POP PASSWORD																						
	8 DNS P.SRV ADDR.																						
	9 DNS S.SRV ADDR.																						
	10 HOST NAME																						
	11 FAX EMAIL ADDR.																						
	12 DSN	ON / OFF																					
	13 (NIC RESET)																						
	COMMUNICATION PARAMETER																						
	G3 COMMUN. SPEED	33.6K / 28.8K / 14.4K / 9.6K / 4.8K BPS	This setting is initialized on the following condition. (Commn. Speed = 33.6 kbps, Echo Protection = OFF, Isdn Dial Modo = G4, Sending File Format = TIFF, Sender ID(Email) = OFF, Return Receipt = OFF) 1.Default Type setting, 2.All Data Clear, 3.Config.Data Clear, 4.The renewal of the TEL No.(ALT#) or Email address registration data and clear.																				
	G3 ECHO PROTECTION	ON/OFF																					
	ISDN DIAL MODE	G4 Mode / G3 Mode																					
	SEND FILE FORMAT	TIFF / PDF																					
	SENDER ID(EMAIL)	ON / OFF																					
	RETURN RECEIPT	ON / OFF																					

No.	User Setting Items	Setting Selection	COUNTRY CODE													
			1 USA	2 INT'L	3 GBR	4 IRL	5 NOR	6 SWE	7 FIN	8 DEN	9 GER	10 HUN	11 TCH	12 POL	13 SUI	14 AUT
40	REDIAL TRIES	0 - 10 TRIES	1	3	2	2	5	10	3	5	10	10	2	2	10	10
41	REDIAL INTERVAL	1 - 6 min	3	3	3	3	2	3	3	3	1	1	3	3	1	1
42	AUTO START	ON / OFF	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
43	DIAL TONE DETECT	ON / OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
44	BUSY TONE DETECT	ON / OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON	OFF	ON	ON	ON	ON
45	MF/DP	DP / MF	MF	MF	MF	MF	MF	MF	MF	MF	MF	DP	MF	DP	MF	MF
46	PULSE DIAL RATE	10 PPS / 16 PPS / 20 PPS	10	10	10	10	10	10	10	10	10	10	10	10	10	10
47	PULSE MAKE RATIO	33 % / 39 % / 40%	39%	33%	33%	33%	33%	39%	39%	39%	40%	33%	39%	33%	40%	40%
48	PULSE DIAL TYPE	N / 10-N / N+1	N	N	N	N	N	N+1	N	N	N	N	N	N	N	N
49	MF(TONE) DURATION	75 ms / 85 ms / 100 ms	100	85	85	85	75	85	85	100	85	100	100	100	85	85
50	PBX LINE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
51	FLS/EARTH/NORMAL	NORMAL / FLASH / EARTH	N	N	N	N	N	N	N	N	N	N	N	N	FLASH	N
52	DIAL PREFIX	OFF / (max. 4digits)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	0...	OFF	OFF	OFF	0...	0...
		XPARA3[0]	fc	e4	20	24	e0	e0	e4	24	ec	e4	e4	e4	ec	ec
		XPARA3[1]	28	28	28	28	28	28	28	28	28	28	28	28	28	28

Note:User setting are possible for items without mesh.

No.	User Setting Items	Setting Selection	COUNTRY CODE														
			15 BEL	16 HOL	17 FRE	18 POR	19 ESP	20 ITA	21 GRE	22 AUS	23 NZL	24 SIN	25 HNG	26 LTA	27 MEX	28 RUS	29 TWN
40	REDIAL TRIES	0 - 10 TRIES	3	2	2	2	2	2	2	2	2	5	2	3	3	3	2
41	REDIAL INTERVAL	1 - 6 min	3	3	6	3	3	3	3	3	3	3	3	3	3	3	3
42	AUTO START	ON / OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON	ON	ON	ON	ON	OFF	ON
43	DIAL TONE DETECT	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF
44	BUSY TONE DETECT	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
45	MF/DP	DP / MF	MF	MF	MF	DP	MF	MF	MF	MF	MF	MF	MF	MF	MF	MF	MF
46	PULSE DIAL RATE	10 PPS / 16 PPS / 20 PPS	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
47	PULSE MAKE RATIO	33 % / 39 % / 40%	33%	39%	33%	33%	33%	39%	39%	33%	33%	33%	33%	39%	39%	33%	33%
48	PULSE DIAL TYPE	N / 10-N / N+1	N	N	N	N	N	N	N	N	10-N	N	N	N	N	N	N
49	MF(TONE) DURATION	75 ms / 85 ms / 100 ms	85	100	75	85	85	85	100	85	85	85	85	100	100	85	100
50	PBX LINE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
51	FLS/EARTH/NORMAL	NORMAL / FLASH / EARTH	N	N	FLASH	N	N	N	N	N	N	N	N	N	N	N	N
52	DIAL PREFIX	OFF / (max. 4digits)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
		XPARA3[0]	64	e0	2c	24	24	e4	24	24	24	24	24	fc	fc	e4	bc
		XPARA3[1]	28	28	28	28	28	28	08	08	08	08	08	28	28	28	28

Note:User setting are possible for items without mesh.

2.9.8 Technical Default Setting

No	Technical Setting Items	Setting Selection	1 ODA	2 LTA	3 E-INT	4 E-GER	5 E-FRE	6 O-AUS	7 O-NZL	8 O-SIN	9 O-HNG	10 L-AG	11 IRL	12 DEN	13 SWE	14 NOR	15 SUI	16 AUT	17 HOL	18 ITA	19 ESP	20 TWN	(21) Factory	Note
1	SERVICE BIT	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	
2	MONITOR CONT.	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	
3	COUNTRY CODE	USA / INT'L / GBR / IRL / NOR / SWE / FIN / DEN / GER / HUN / TCH / POL / SUI / AUT / BEL / HOL / FRE / POR / ESP / ITA / GRE / AUS / NZL / SIN / HNG	USA	LTA	GBR	GER	FRE	AUS	NZL	SIN	HNG	USA	IRL	DEN	SWE	NOR	SUI	AUT	HOL	ITA	ESP	TWN	INT'L	
4	TIME DATE PRINT	OFF / ONCE / ALL	OFF	OFF	OFF	ALL	OFF	OFF	ALL	ONCE	OFF	OFF	OFF	ONCE	ONCE	OFF	ALL	ALL	ONCE	ALL	ONCE	OFF	ONCE	
5	TSI PRINT	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
6	TAD MODE	OFF / TYPE1 / TYPE2 / TYPE3	TYP2	TYP2	OFF	TYP1	TYP1	OFF	TYP1	OFF	OFF	TYP2	OFF	TYP2	TYP2	OFF	TYP1	TYP1	TYP1	OFF	TYP2	TYP2	OFF	
7	REAL TIME DIAL	OFF / TYPE1 / TYPE2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	TYP2	By PTT Parameter
8	TEL/FAX SWITCH	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	
9	MDY / DMY	MDY / DMY	MDY	MDY	DMY	DMY	DMY	DMY	DMY	DMY	DMY	MDY	DMY	MDY	MDY	DMY	DMY	DMY	DMY	DMY	DMY	MDY	MDY	
10	LONG DOC. SCAN	ON / OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	
11	TONE FOR ECHO	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
12	MH ONLY	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
13	H/MODEM RATE	4.8K / 9.6K / 14.4K / 28.8K / 33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	33.6K	
14	T1(TX) TIMER VALUE	010 - 255 sec	59	59	60	60	140	30	40	60	30	59	60	60	60	60	60	60	60	40	45	59	60	By PTT Parameter
15	T1(RX) TIMER VALUE	010 - 255 sec	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	
16	T2 TIMER *100MS	001 - 255 (100ms - 25.5sec)	130	130	130	60	51	130	130	130	130	130	130	130	130	130	60	60	130	130	51	130	130	Base Timer = 100ms
17	DIS BIT32	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
18	ERROR CRITERION	0 - 99 %	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
19	OFF HOOK BYPASS	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
20	NL EQULIZER	0DB / 4DB / 8DB / 12DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	0DB	
21	ATTENUATOR	0 - 15 dB	10dB	10dB	11dB	9dB	10dB	11dB	11dB	11dB	11dB	10dB	11dB	11dB	11dB	11dB	9dB	9dB	11dB	8dB	11dB	12dB	10dB	FRE = 7 - 15 DB
22	T/F TONE ATT.	0 - 15 dB	10dB	10dB	9dB	7dB	11dB	9dB	9dB	9dB	9dB	10dB	9dB	10dB	9dB	9dB	7dB	7dB	10dB	12dB	10dB	10dB	10dB	
23	MF ATT.	0 - 15 dB	3dB	8dB	6dB	8dB	4dB	5dB	6dB	5dB	8dB	3dB	5dB	8dB	5dB	8dB	1dB	4dB	8dB	4dB	5dB	5dB	8dB	
24	RING DURA. *10MS	10 - 99 (*10 ms)	12	12	14	14	60	12	14	14	14	12	14	12	14	14	14	11	14	14	14	12	12	
25	CML TIMING *100MS	1 - 19 (*100 ms)	3	3	3	3	15	3	12	12	12	3	3	3	1	3	3	3	11	3	3	3	3	
26	LEAD HEAD STROBE	00000 - 11111	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	10100	
27	MEDIA TYPE	M / MH / H	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
28	TR LATCH CURRENT	-2 / -1 / 0 / +1 / +2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	V34 TX RETRY	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
30	SYMBOL RATE	2400 / 2800 / 3200 / 3428	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	3429	
31	NSF SWITCH	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
32	ID/TSI PRIORITY	ID / TSI	ID	ID	ID	TSI	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	TSI	TSI	ID	ID	ID	ID	ID	
33	TONER COUNT CLEAR	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
34	PARALLEL PICK UP	ON / OFF	ON	ON	ON	OFF	ON	ON	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	ON	ON	
35	PRINT PRIORITY	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
36	RELAY BROADCAST	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	Only FX-176VP
37	FAX2NET FUNCTION	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	

No	Technical Setting Items	Setting Selection	1 ODA	2 LTA	3 E-INT	4 E-GER	5 E-FRE	6 O-AUS	7 O-NZL	8 O-SIN	9 O-HNG	10 L-AG	11 IRL	12 DEN	13 SWE	14 NOR	15 SUI	16 AUT	17 HOL	18 ITA	19 ESP	20 TWN	(21) Factory	Note
38	JBIG FACILITY	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	Only FX-176VP
39	LLC CHECK	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
40	G3/G4 LEARNING	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
41	G3 SETUP BC	3.1KHz/SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	SPEECH	
42	G3 RETRY SETUP	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
42	GATEWAY SERVICE	ON / OFF	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	
43	EMAIL MAINTENANCE	ON / OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
44	ADMIN EMAIL ADDR.	Email Address	The outside of the object of the default settings.																					
45	COMMAND T.O.	5SEC / 30SEC / 5MIN	The outside of the object of the default settings. This setting reads the setting value of NIC card.																					

E-XXX=OEL-XXX , CO-XXX=OKI-XXX , CL-XXX=LANIER-XXX

Note: As for the setting of the part of mesh, Default-data does'nt exist in the Default-file.
This setting has the data which are characteristic of the device.

2.9.9 Off-line Tests

(1) Purpose
Activate self-diagnosis which includes:

1) Main board
   • CPU ROM version printing
   • CPU RAM check
   • PROG version printing
   • LANGUAGE version printing
   • DEFAULT version printing
   • MODEM version printing
   • RAM check
   • RAM check (optional memory board)

2) HSP (LAN board)
   • Board check

3) ISDN board, G3 OPTION board
   • CPU ROM version printing
   • CPU RAM check
   • PROG version printing
   • RAM check
   • DPRAM check
   • MODEM version printing (only GG3 option board)

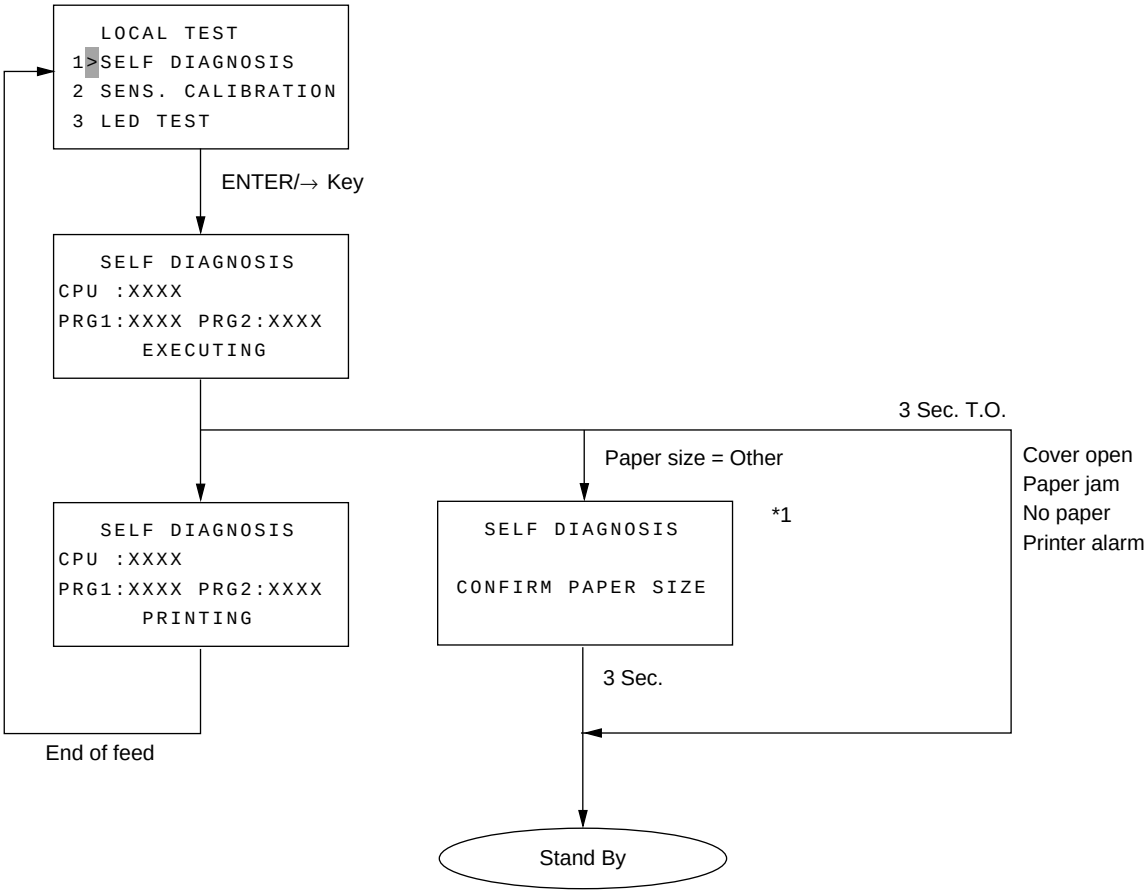
4) IPFAX (T.38) board
   • Board check
   • IPL version printing
   • PROG version printing

5) Printing function

(2) Operations:
1. The machine is standby state with no document.
2. Press the MENU/EXIT key once.
3. Press the RESOLUTION key twice.
   The display will be shown the “TECHNICAL PRG.”.
4. Press the ENTER/SHIFT RIGHT (→) key.
   The display will be shown the “LOCAL TEST”.
5. Press the ENTER/SHIFT RIGHT (→) key.
   The display will be shown the “SELF DIAGNOSIS”.

2.9.9.1 Self Diagnosis Flow

To check ROMs, RAMs and printing function.
Test report will be automatically printed out.



*1: OTHER is shown as below:
EXEC./JIS-B5/A5/A6

SELF DIAGNOSIS REPORT

12/24/1999 12:00
ID=0dc Takasaki

MAIN BOARD				
	CPU-ROM	VERSION	aaaa	
		HASH	OK	hhhh
	CPU-RAM		OK	
	PROGRAM1	VERSION	aaaa	
		HASH	OK	hhhh
	PROGRAM2	VERSION	aaaa	
		HASH	OK	hhhh
	LANGUAGE	VERSION	aaaa	
		HASH	OK	hhhh
	DEFAULT	VERSION	aaaa	
		HASH	OK	hhhh
	DEFAULT	TYPE	01	
	MODEM	VERSION	hhhh	
	RAM1	8M	OK	
	RAM2		OK	
	CARTRIDGE(TONER/ID)		bbbb/bbbb	*4
	OPT-MEM	2M	OK	*1
DEVICE ID	FX-176VP			
HSP	TYPE2		OK	*2
G3 OPTION BOARD			OK	*3
	CPU-ROM	VERSION	aaaa	
		HASH	OK	hhhh
	CPU-RAM		OK	
	PROGRAM	VERSION	aaaa	
		HASH	OK	hhhh
	RAM	2M	OK	
	DPRAM	2K	OK	
	MODEM	VERSION	hhhh	

2.9.9.2 Self Diagnosis Report

Purpose: To check ROMs, RAMs and Printing function
Method: The report will be manually printed out for maintenance purpose.

2.9.9.2.1 Difference from FX-056e/176e

2.9.10 On-line Tests

1. Transmission

(1) Load documents
(2) Make sure that
  • The loaded documents are fed in automatically.
  • The STD and NORMAL lamps light.
  • The display shows SELECT LOCATION(S) OR PRESS COPY.
(3) Dial the telephone number of the remote machine by the ten-key pad.
(4) Make sure that the telephone number of the remote machine is shown on the display.
(5) Press the START/COPY button.
(6) Typical message transmission flow is described in Figure 2.9.10.1.

2. Reception

(1) Use another machine for dialing.
(2) Make sure that
  • The display shows AUTO REC. START.
  • The message is automatically received.
(3) Typical message reception flow is described in Figure 2.9.10.2

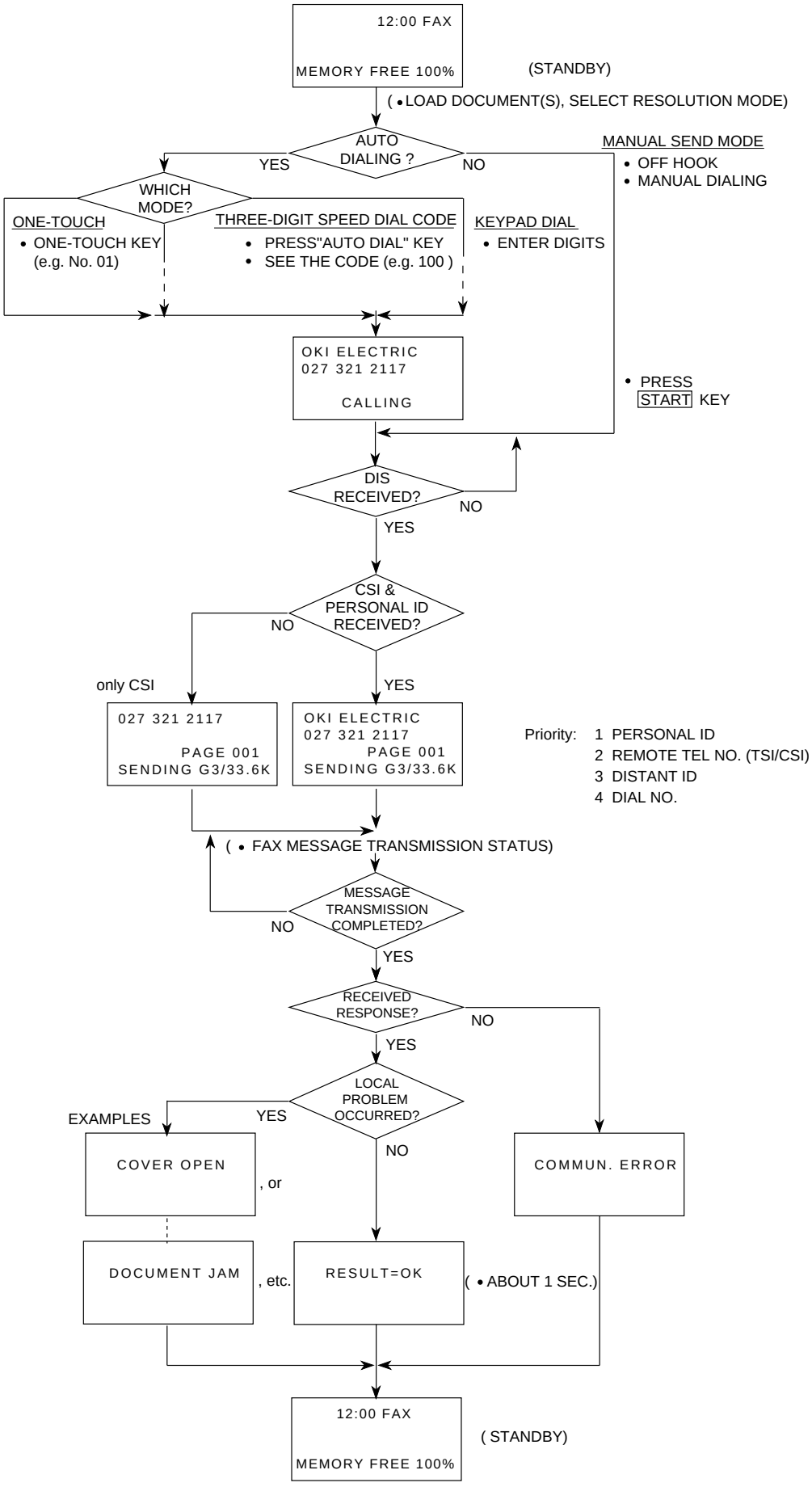


Figure 2.9.10.1 Typical Transmission flow

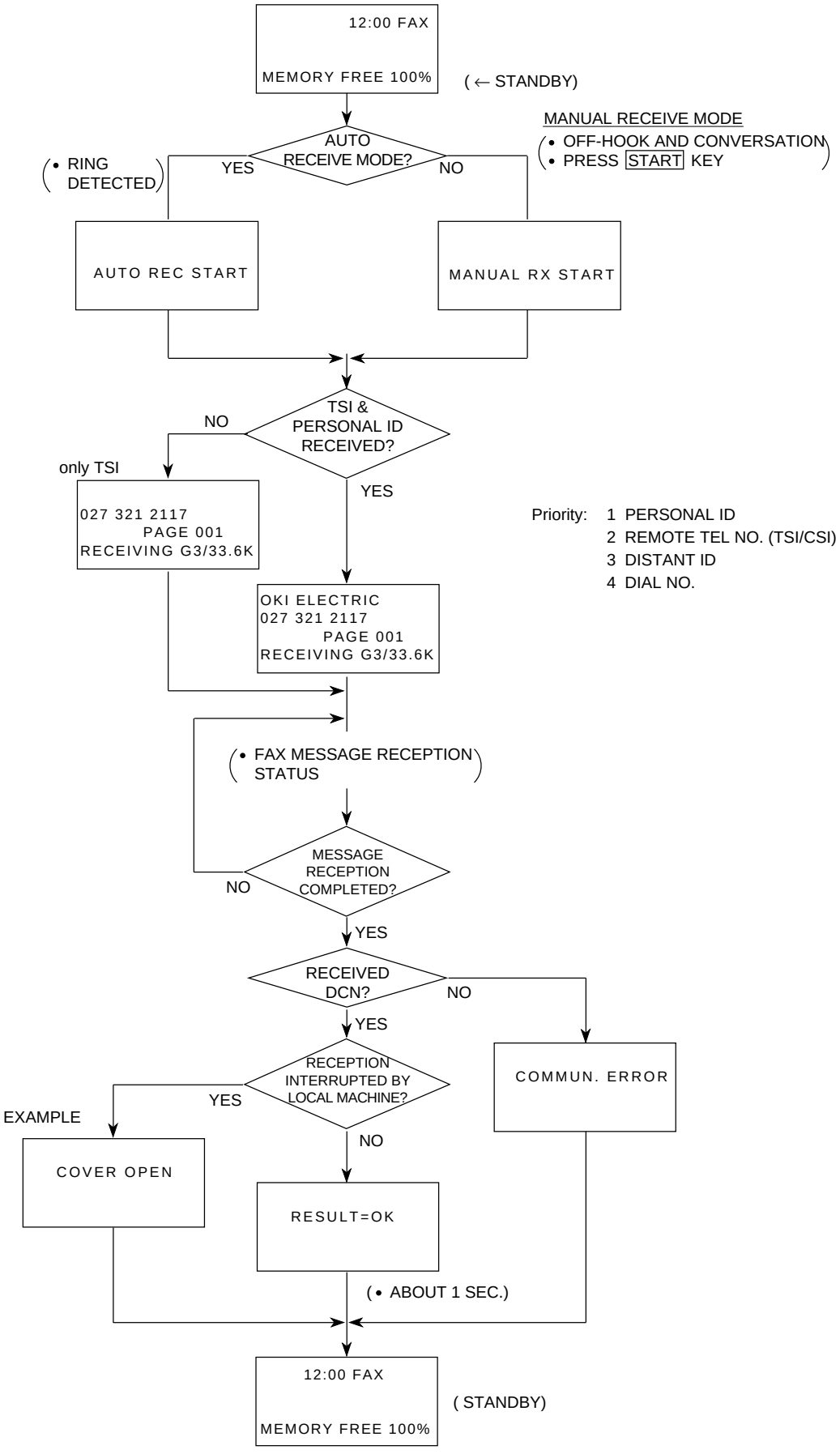


Figure 2.9.10.2 Typical Reception flow

2.10 Installation of optional units

2.10.1 Optional units

(1) Items
- Memory EXP. Board-RA1-/-2/-3
- Board-G4A
- Board-LAN
- G3 Dual-line
  - Board-G3A
  - Board-DM2
  - Board-UNC/TBO/WN5
- 2nd tray unit

(2) Procedure
- Turn the facsimile power switch OFF and remove the AC power cord.

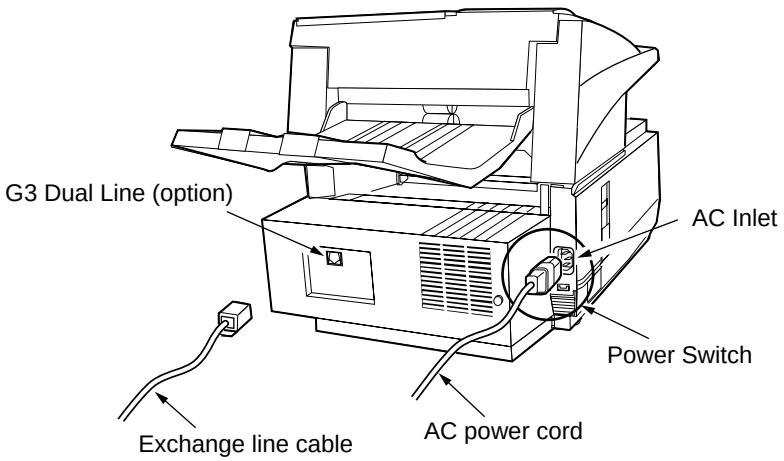
Note: Unplug the AC power cord from the wall outlet first and then from the facsimile.

- Do not remove unnecessary parts.
- Since screws and small parts are likely to be lost, they should temporarily be attached to their original positions.

2.10.2 Memory Board Installation Instruction

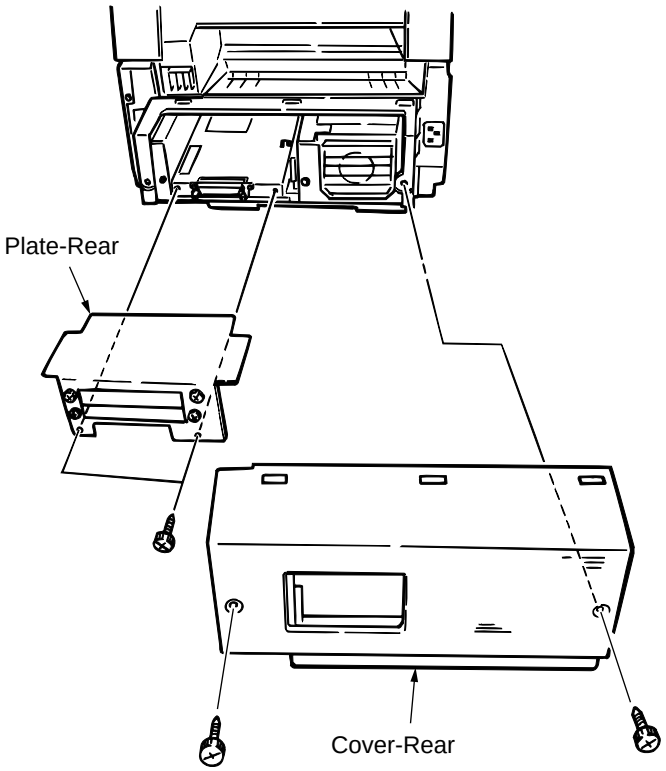
1. Turn the facsimile power switch off and remove the AC power cord.

   Note: Unplug the AC power cord from the wall outlet first and then from the facsimile.

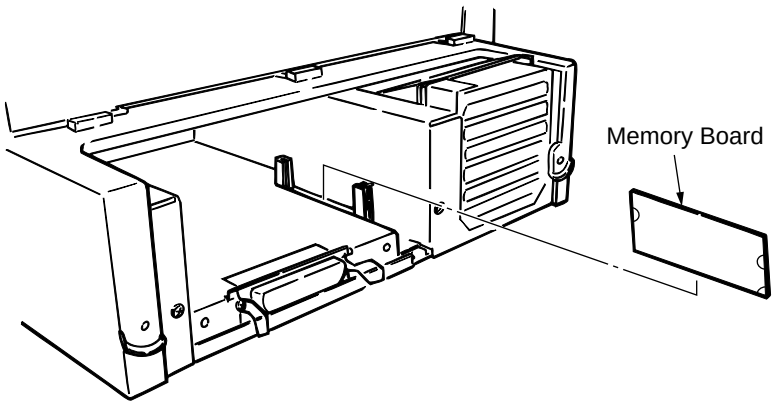


2. If G3 Dual Line option is installed, disconnect the exchange line cable.

3. Remove Cover-Rear, Plate-Rear



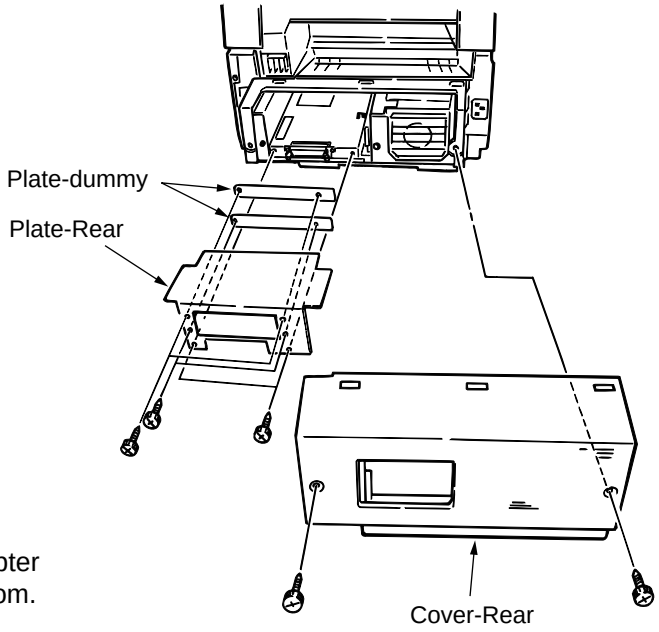
4. Connect Memory Board



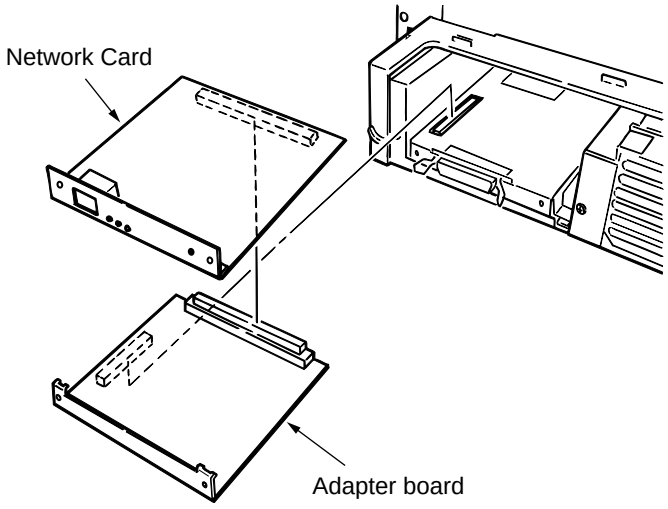
5. Attach Plate-Rear and Cover-Rear.

2.10.3 Network Card Installation Instruction

1. Remove Cover-Rear, Plate-Rear and 2 piece of Plate-dummy.

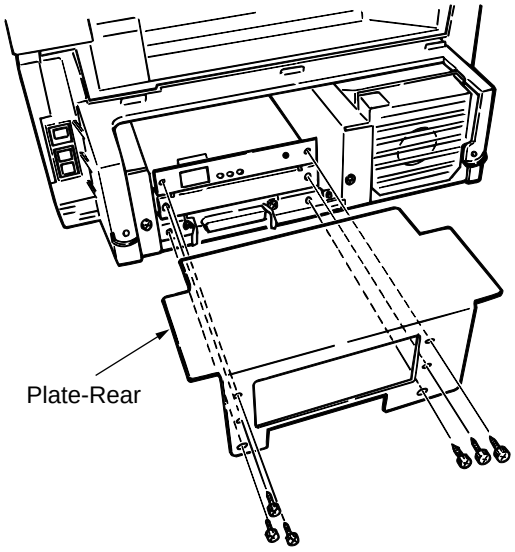


2. Connect Network card with Adapter board, then, mount it into the room. In case of G4 board application, exchange above Adapter board to G4 board.



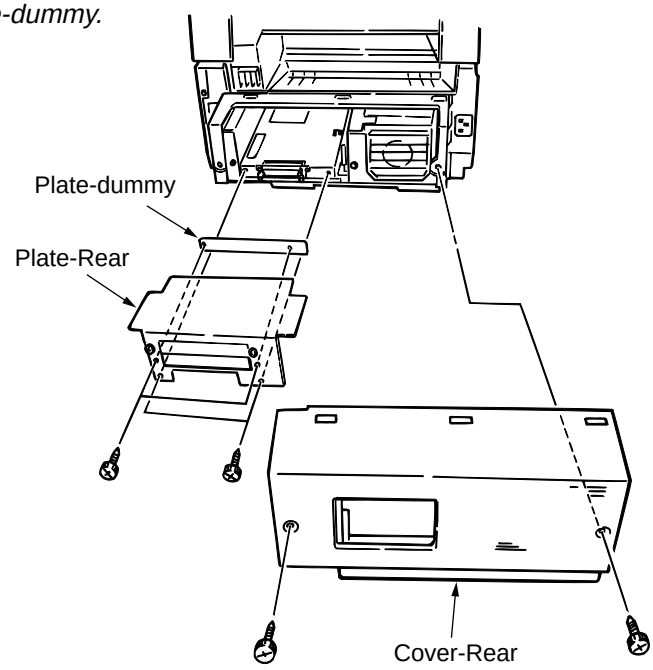
3. Attach Plate-Rear, and fix Network card, Adaptor board with 2 each screw. Then fix Plate-Rear.

4. Attach Cover-Rear.

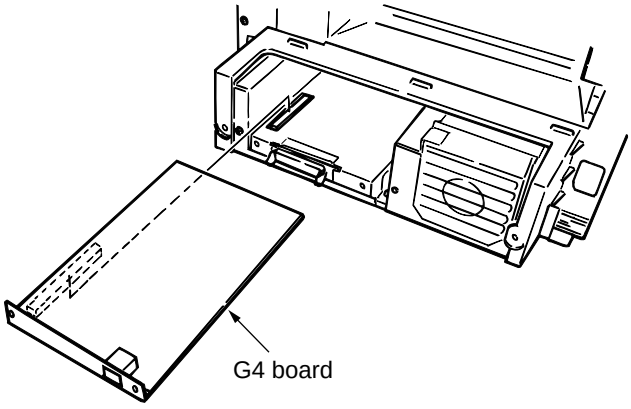


2.10.4 G4 Board Installation Instruction

1. Remove Cover-Rear, Plate-Rear and Plate-dummy.
   Caution: Remove only lower Plate-dummy.



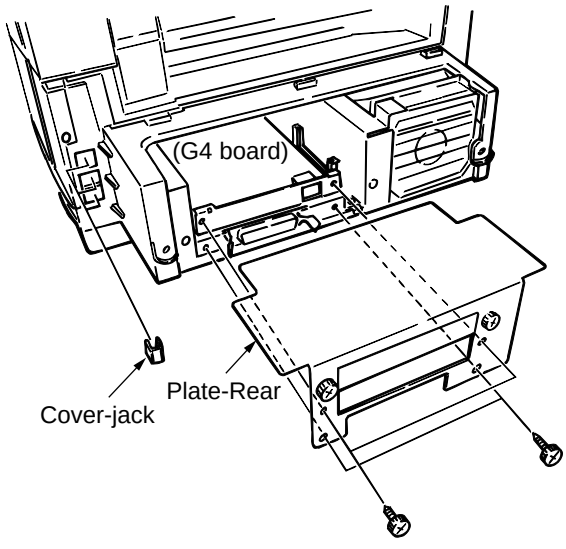
2. Mount G4 Board.



3. Attach Plate-Rear, and fix G4 board with 2 screws, then fix Plate-Rear.

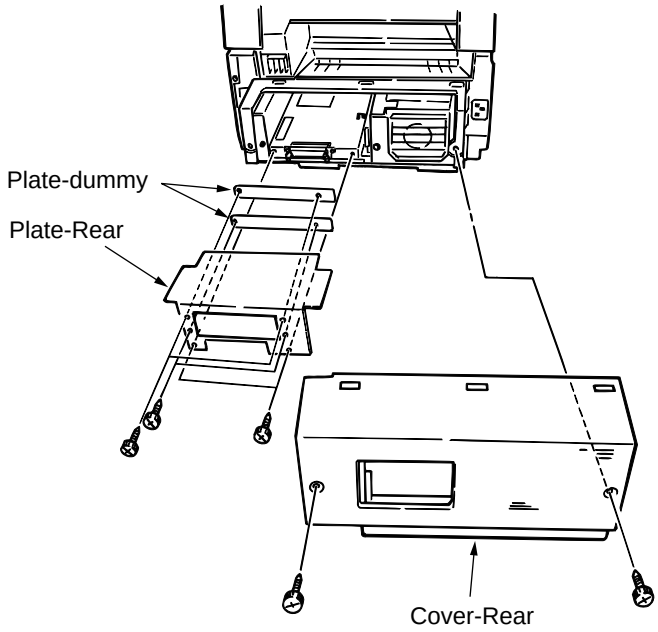
4. Attach Cover-Rear.

5. Attach three Cover-jack to the line, TEL1, TEL2 connector.

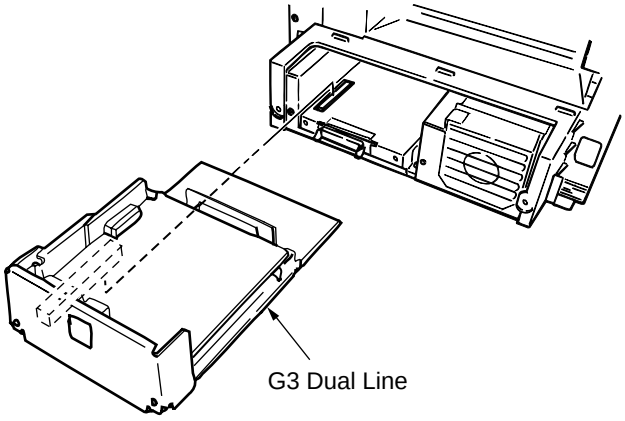


2.10.5 G3 Dual Line Installation Instraction

1. Remove Cover-Rear, Plate-Rear and 2 piece of Plate-dummy.

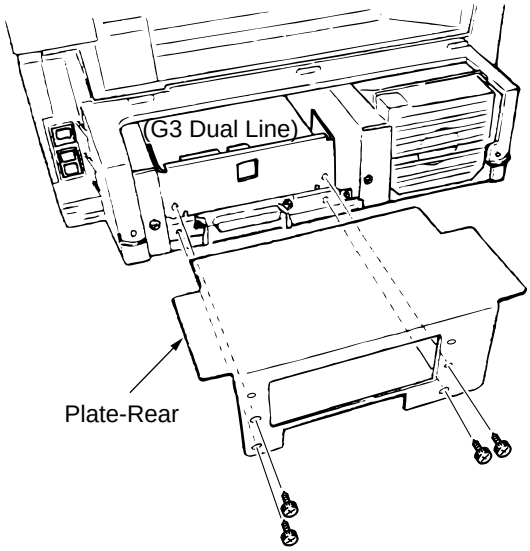


2. Mount G3 Dual Line



3. Attach Plate-Rear, and fix G3 Dual Line with 2 screws, then fix Plate-Rear.

4. Attach Cover-Rear.



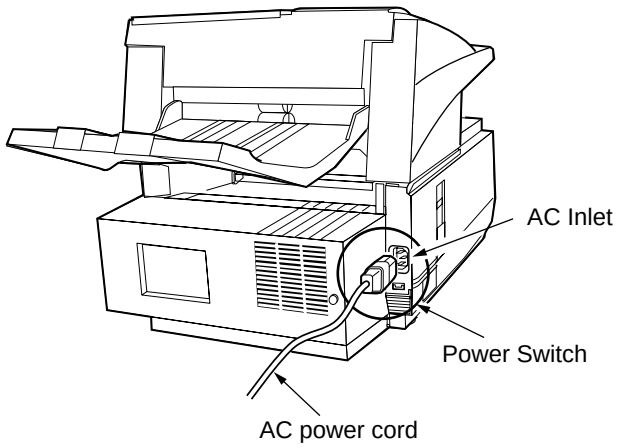
2.10.6 Second Paper Cassette Unit

This item explains how to install the Second Paper Cassette Unit option for FX-056VP/176VP Facsimile Transceiver.

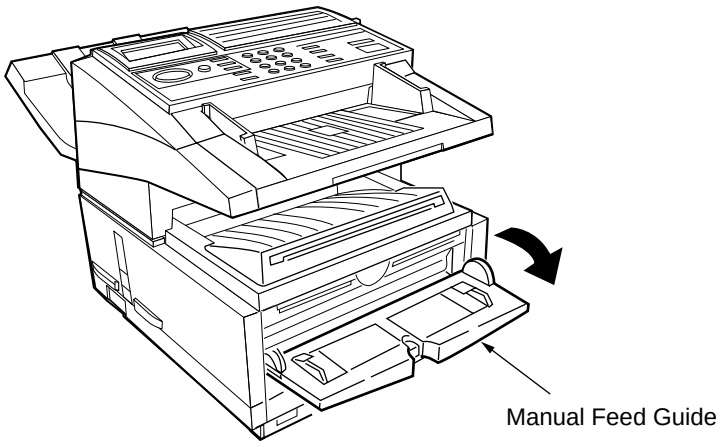
Second Paper Cassette Unit installation

1. Turn the facsimile power switch off and remove the AC power cord.

   Note: Unplug the AC power cord from the wall outlet first and then from the facsimile.

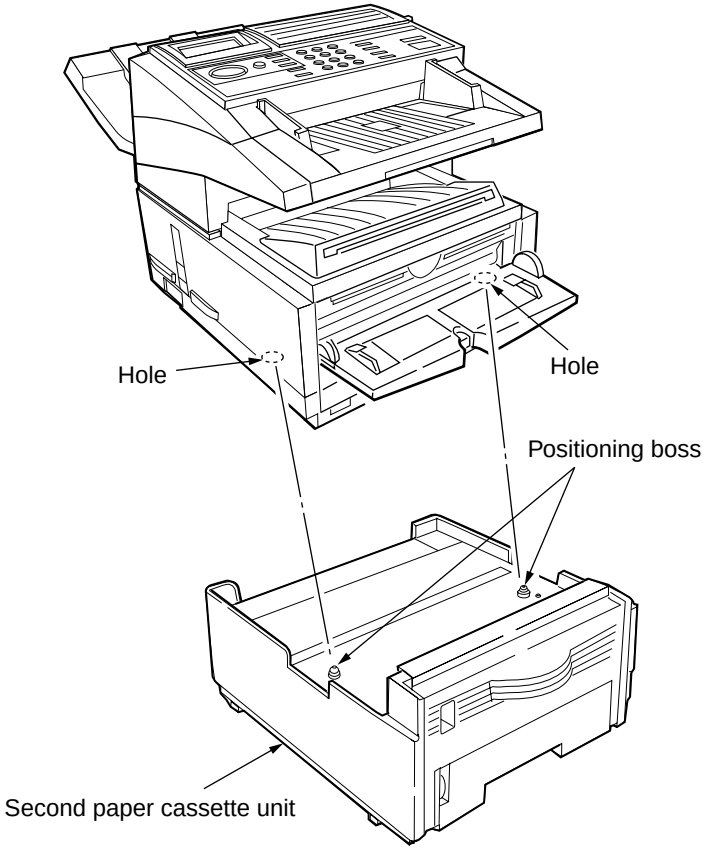


2. Open the Manual Feed Guide.

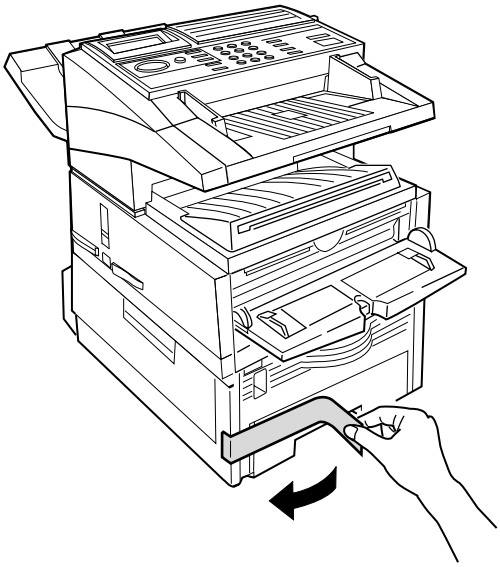


3. Gently lower the facsimile on the Second Paper Cassette Unit.

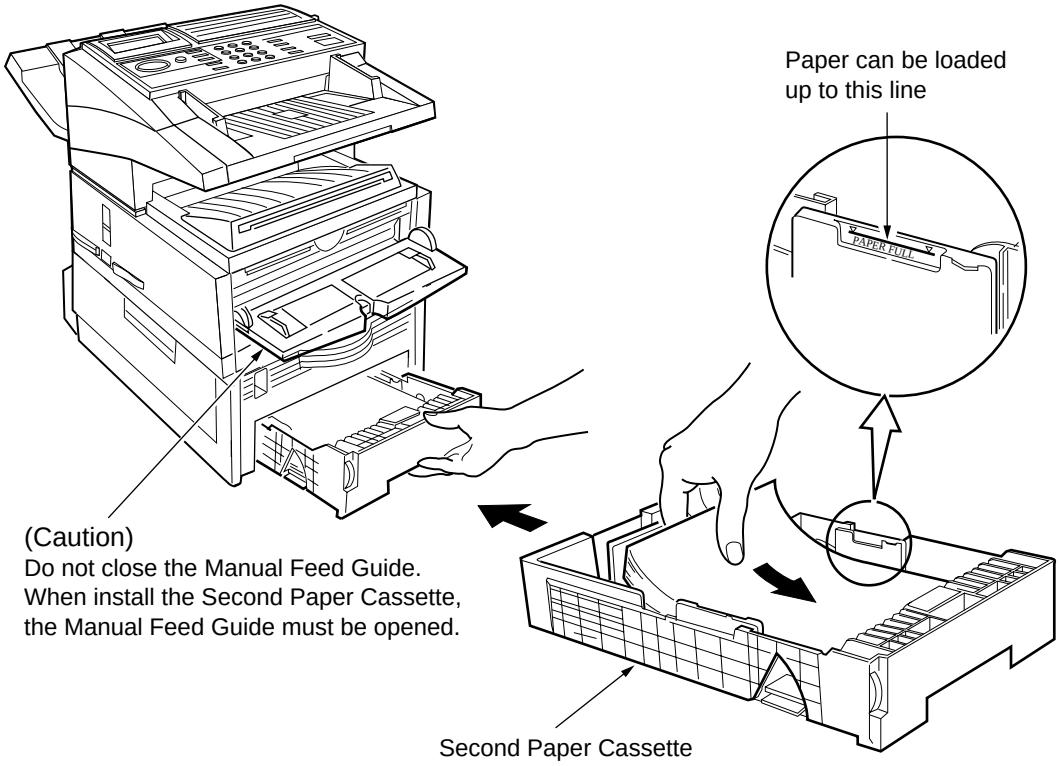
Note: Make sure that the positioning boss of the Second Cassette Unit fits into the 2 holes at the bottom of the facsimile transceiver main unit.



4. Peel off the tape attached on the Second Paper Cassette Unit.

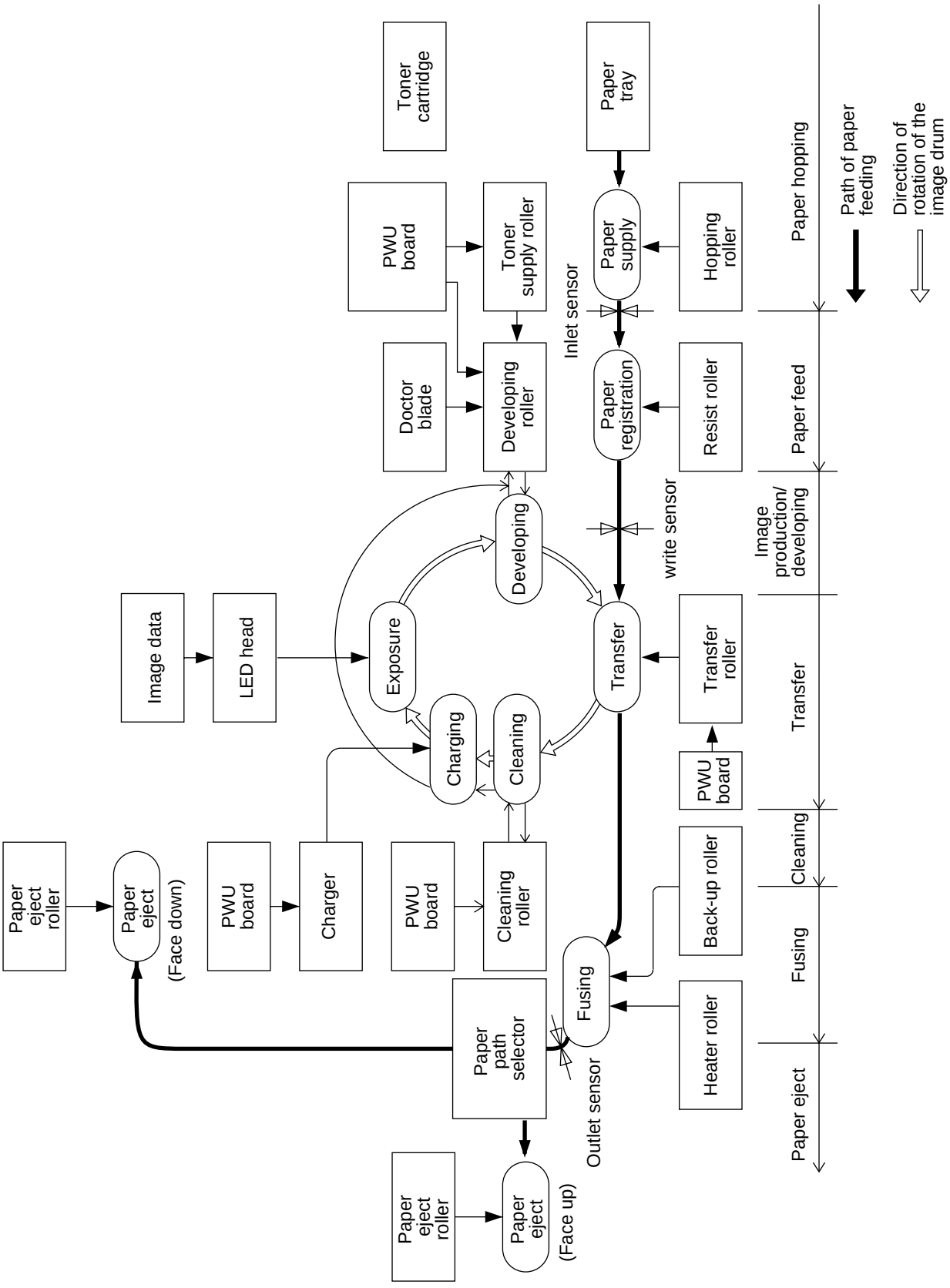


5. Install the Second Paper Cassette. Approximately 500 sheets of recording paper (20-lb bond) can be loaded.


Paper can be loaded
up to this line
PAPER FULL
(Caution)
Do not close the Manual Feed Guide.
When install the Second Paper Cassette,
the Manual Feed Guide must be opened.
Second Paper Cassette

6. Reconnect the power cord to the wall and facsimile, and Turn the facsimile power on.

3. BRIEF TECHNICAL DESCRIPTION

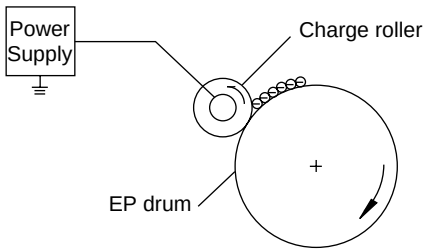
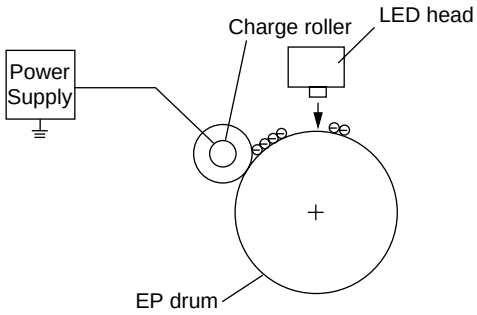
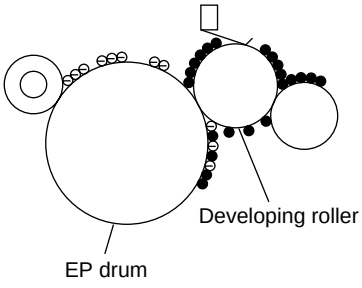


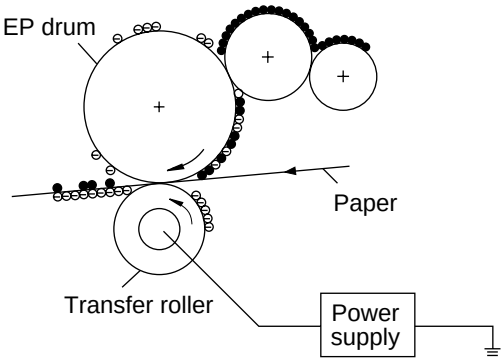
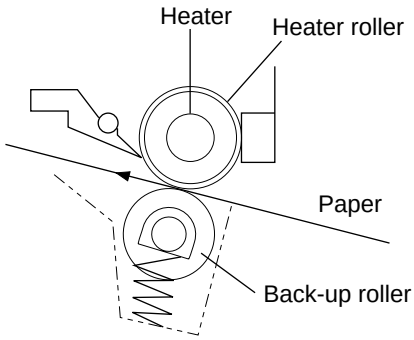
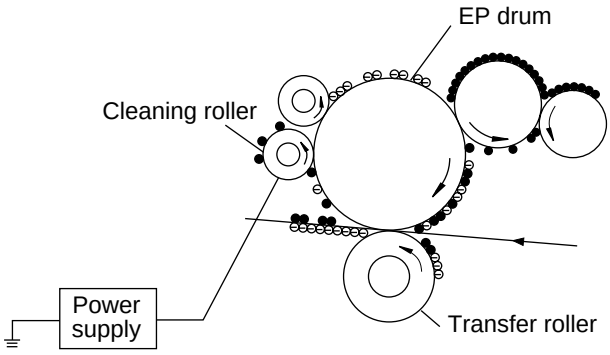
Electro-photographic Process Flow

3.1 Fundamentals of the Electro-Photographic Process

The electro-photographic process involves six sub-processes:
(1) Charging (2) Exposure (3) Development (4) Transfer (5) Fusing (6) Cleaning

Outline of each process is explained below.

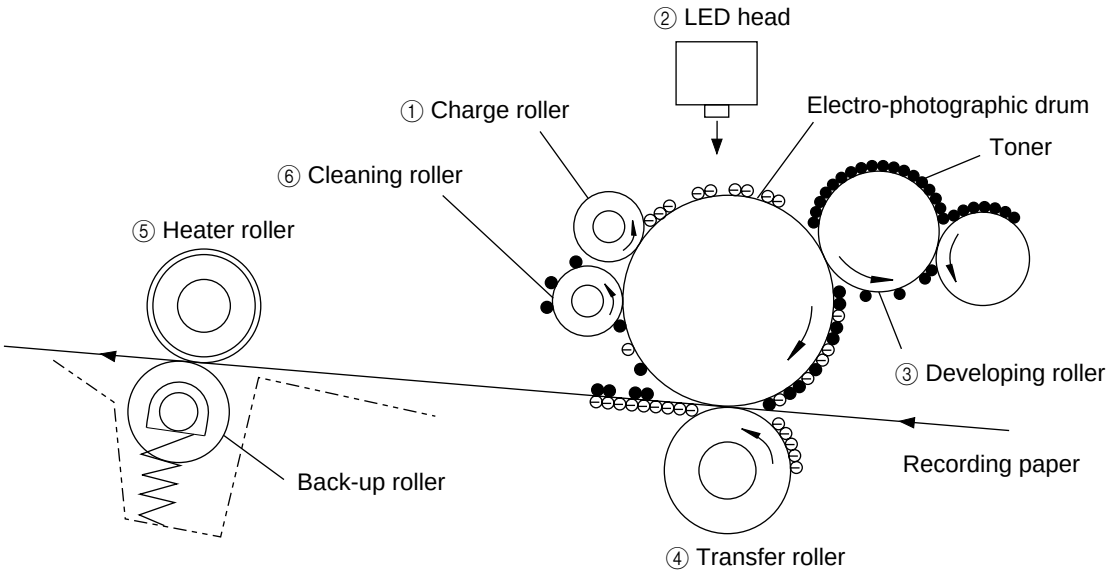
Process	Illustration	Description
1 Charging		The surface of the electro-photographic Image drum is uniformly charged with negative charges by applying a negative voltage to the charge roller. When the applied DC voltage exceeds a threshold value, charging of the drum begins.
2 Exposure		Light emitted from the LED head irradiates the negatively charged surface. The potential of the irradiated part of the Image drum surface is raised, so that an electrostatic latent image associated with the print image is formed.
3 Development		Toner is attracted to the exposed part (high-potential part) of the Image drum at the contact between the Image drum and the developing roller, making the electrostatic latent image visible. At the same time, the residual toner on the Image drum is attracted to the developing roller by static electricity.

Process	Illustration	Description
4 Transfer		The recording paper is placed over the Image drum surface and a positive charge, opposite in polarity to the toner, is applied to the reverse side of the paper from the transfer roller. The toner is attracted by the positive charge and is transferred to the paper. The toner charged negative that is attracted to the Image drum surface is transferred to the upper side of the recording paper by the positive charge on the lower side of the paper.
5 Fusing		The unfused toner image is fused on the paper under heat and pressure as it passes between the heater roller and the back-up roller.
6 Cleaning		Residual toner on the Image drum is attracted to the cleaning roller temporarily by static electricity on the Image drum surface.

3.2 Actual Electo-photographic Process

The electro-photographic process consists of six essential processes.

The following Figure 3.2.1 provides a general description.



* Process:

① : Charging
② : Exposure
③ : Developing
④ : Transfer
⑤ : Fusing
⑥ : Cleaning

Figure 3.2.1 Actual EP Process

3.3 Boards and Units

The following boards and units constitute the facsimile transceiver machine.

Standard	
• MCNT (Main control board)	E76-2 (FX-056VP) E76 (FX-176VP)
• V.34 Modem	K34/J34
• NCU (Network Control Unit)	UNC- (USA/Canada) WN5- (INT'L/AUS) TBO- (OEL)
• Operation panel assembly unit	P76- (Main), P77- (One-touch)
• High Voltage Power Unit	H10-
• ID/Toner Lock Board	DLK-
• Low Voltage Power Unit	MPW2520 (120V) MPW2420 (230V)
Option	
• Optional Memory	RA- (2M byte) RA-2 (4M byte) RA-3 (8M byte)
• G4 Board	G4A-2
• Adapter board for NIC	DM1-
• NIC (Network Interface Card)	MLETB08
• G3 Dual Line	
- G3A Board	G3A-
- Adapter board for G3A	DM2-
- NCU (Network Control Unit)	UNC- (USA/Canada) WN5- (INT'L) DN5- (GER) FN5- (UK/France)
• 2nd Tray Unit	TQSB

3.4 Overall Dimension and Mechanical Structure of FX-056VP/176VP

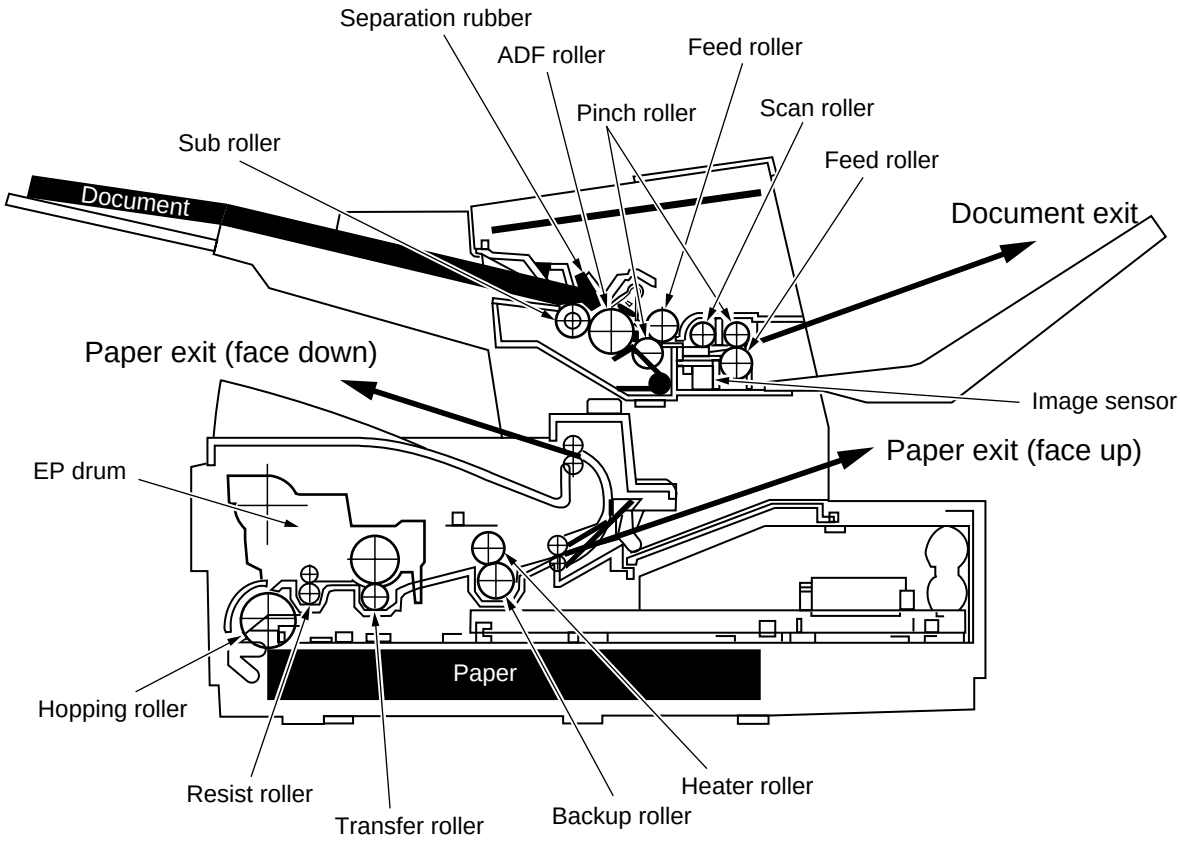


Fig. 3.4.1-1 Overall Dimension and Mechanical Structure 1/2

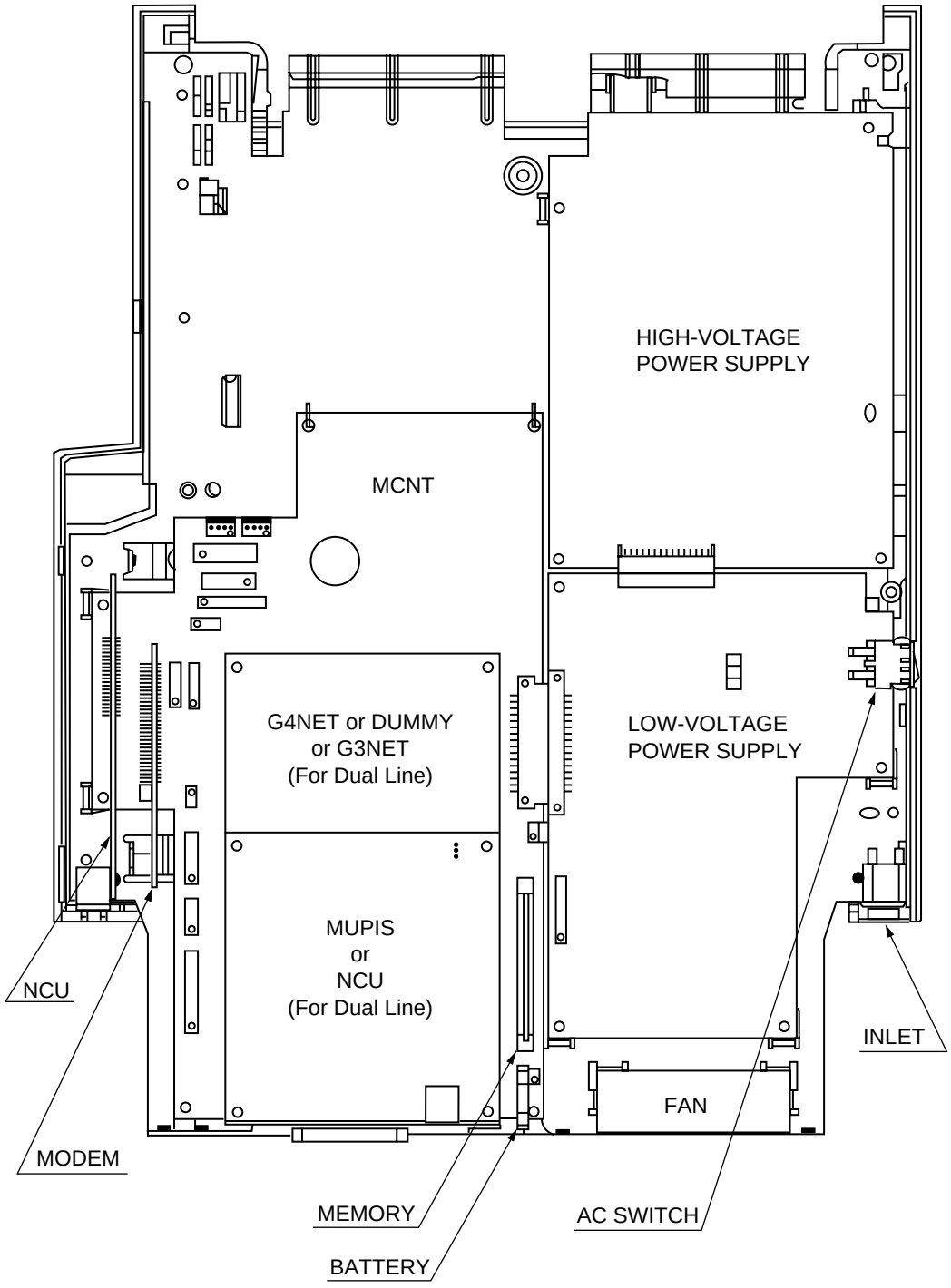


Fig. 3.4.1-1 Overall Dimension and Mechanical Structure 2/2

4. MECHANICAL DISASSEMBLY AND REASSEMBLY

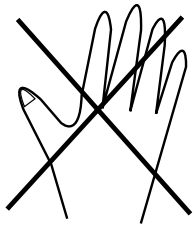
The section explains the procedures for replacement of parts, assemblies, and units in the field. Only the disassembly procedures are explained here. For reassembly, reverse the disassembly procedure.

4.1 Precautions for Parts Replacement

DANGER

Do Not
Touch !

HIGH VOLTAGE



You may be subjected to high-voltage electric shock by touching the following parts without an insulating material:

a. High-voltage unit PC board
b. Low-voltage PC board
c. Contact ass'y
d. Power supply unit

* The high voltage risk may continue for about 3 days after power-off.
* Never touch the power supply unit pattern.

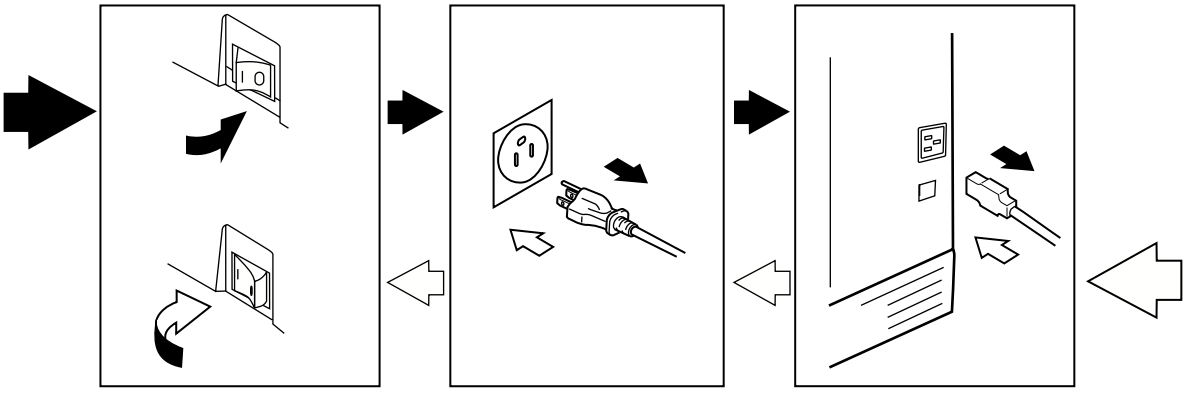
(1) Before starting to replace parts, remove the AC cord.

(a) Remove the AC cord in the following sequence:

1. Turn off ("o") the power switch of the machine.
2. Disconnect the AC inlet plug of the AC cord from the AC receptacle.
3. Disconnect the line cable from the machine.

(b) Reconnect the machine in the following procedure:

1. Connect the AC cord and line cable to the machine.
2. Connect the AC inlet plug to the AC receptacle.
3. Turn on ("I") the power switch of the machine.



(2) Do not disassembly the printer as long as it is operating normally.

(3) Do not remove parts which do not have to be touched; try to keep the disassembly to a minimum.

(4) Use specified service tools.

(5) When disassembling, follow the laid out sequences. Parts may be damaged if these sequences are not followed.

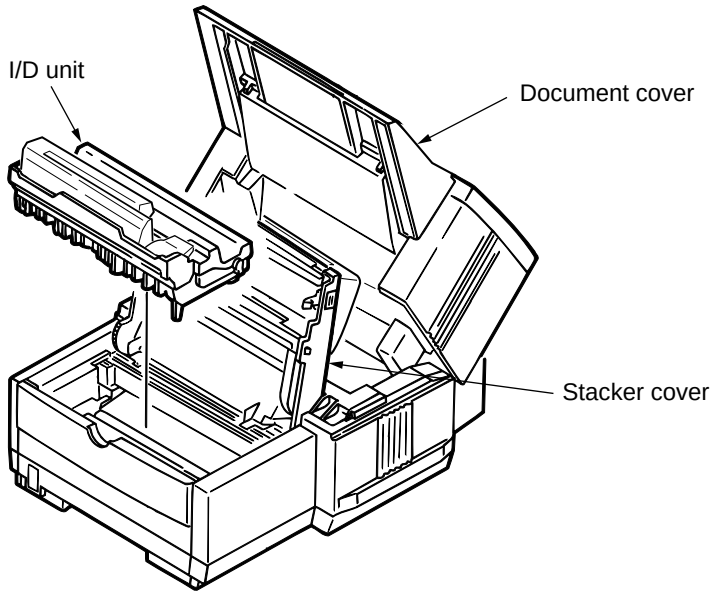
(6) Since screws, collars and other small parts are likely to be lost, they should temporarily be attached to the original positions during disassembly.

(7) When handling IC's such as microprocessors, ROMs and RAMs, or circuit boards, do not wear gloves that are likely to generate static electricity.

(8) Do not place printed circuit boards directly on the equipment or floor.

(9) Remove the I/D unit (image drum unit).

- Open the document cover and stacker cover, then remove the I/D unit.

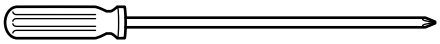
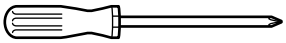
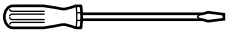
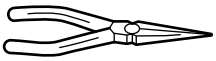
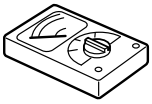


Caution: Do not expose the I/D unit to direct sunlight. To protect the I/D unit against room lights, cover it with A4-size paper or the like.

Board or Part	Adjustment
(a) NCU board	DIP switches to be placed in the same position as on the removed board. Refer to Chapter 8.
(b) LED print head	When the rank marking of the replaced LED print head (new part) is the same as that of the used LED print head (old part), you do not always have to set the LED print head strobe time by the technical function (Refer to chapter 5).

4.2 Tools

Table 4.1 shows the tools required for the replacement of parts such as circuit boards and mechanical units.

No.	Service tools		Q'ty	Remarks
1		Philips screw driver (L)	1	
2		Philips screw driver (M)	1	
3		Flat screw drivers (S)	1	
4		Philips screw driver (S)	1	
5		Radio pliers	1	
6		Nippers	1	
7		Multimeter	1	Short-ciucuit test

4.3 How to Disassemble and Reassemble

This section explains how to disassemble and reassemble the fax.

- Figure 4.1 shows the disassembly procedure flow as generalization.
- The detailed disassembly procedure is explained from sub-section 4.3.1 to 4.3.28.

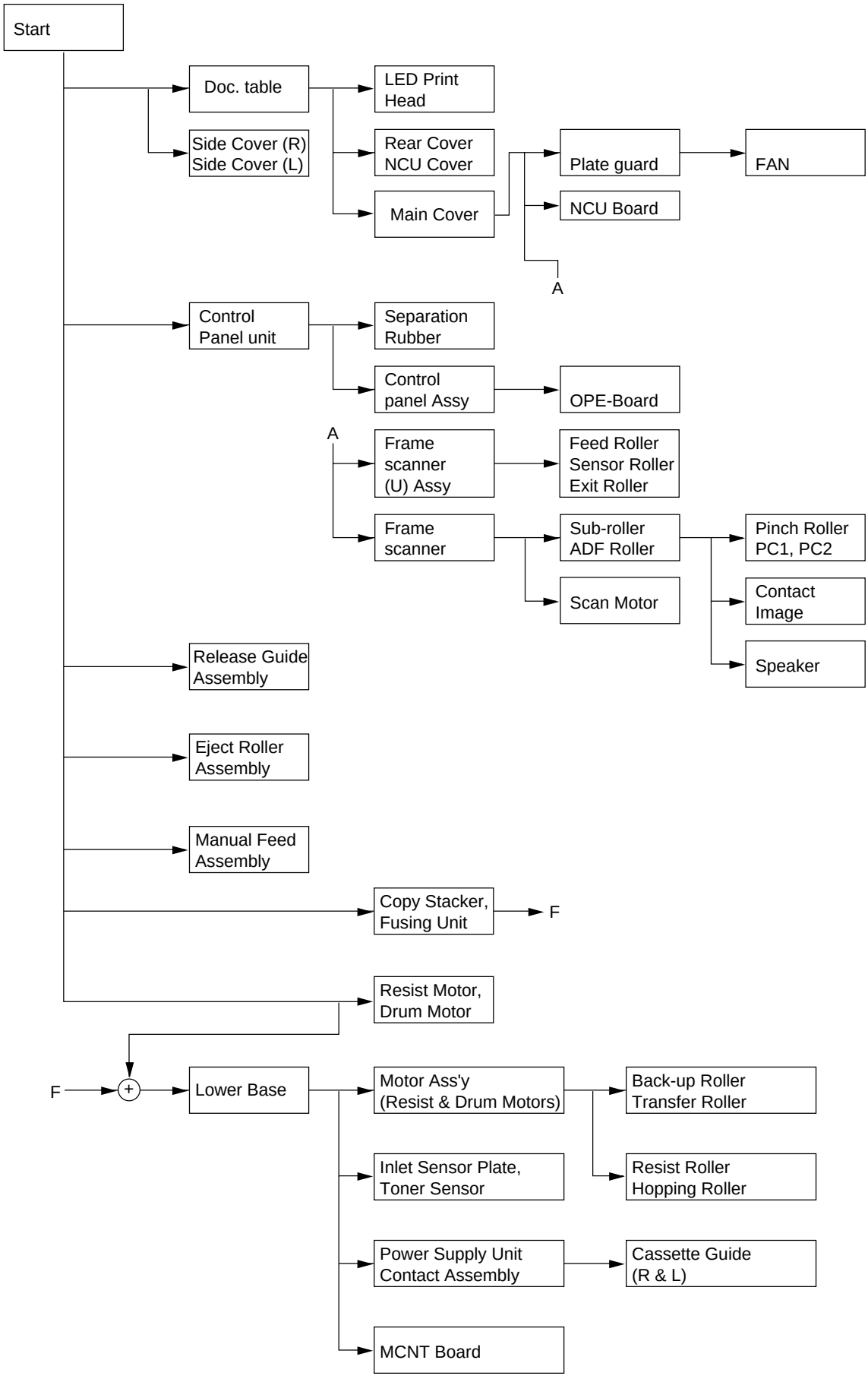
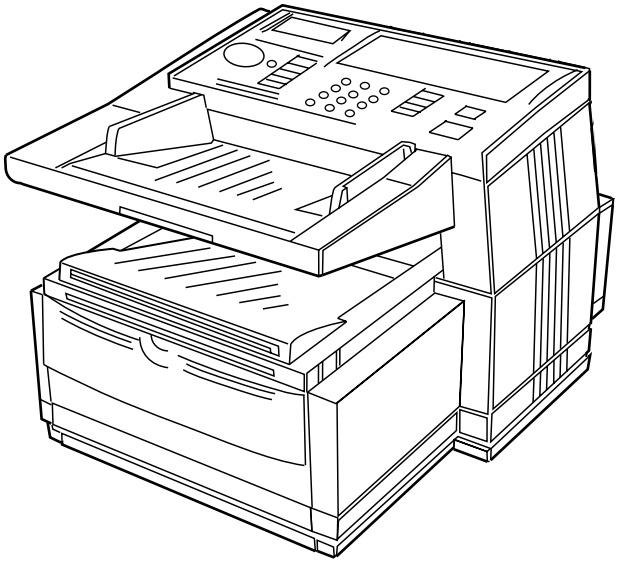


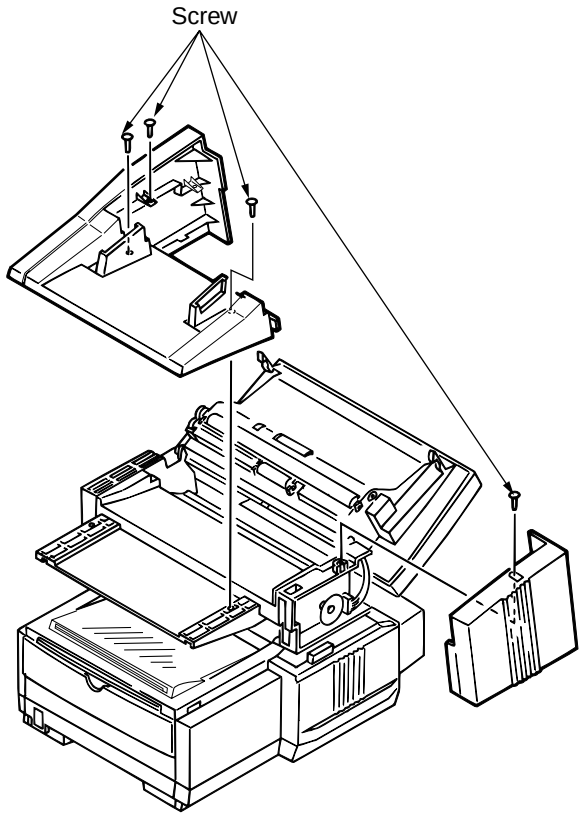
Fig. 4.1 FX-056VP/176VP Disassembly Procedure Flow

Appearance of the FX-056VP/176VP



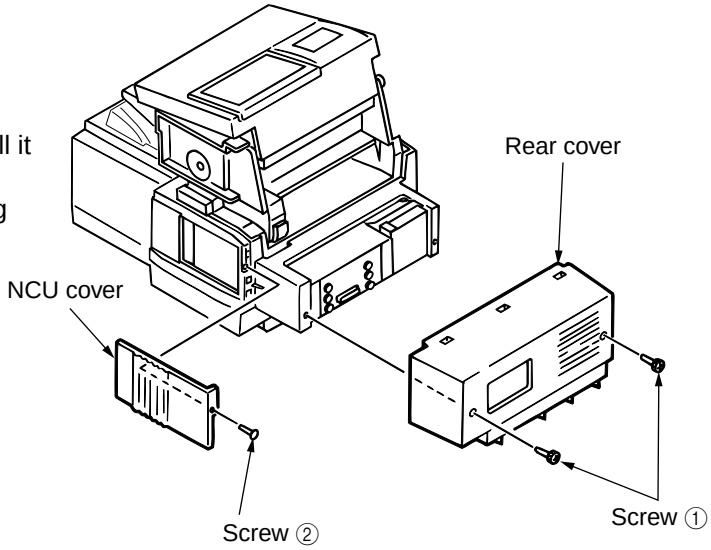
4.3.1 Document Table Cover

1. Open the operation panel.
2. Remove the cover by unscrewing four screws.



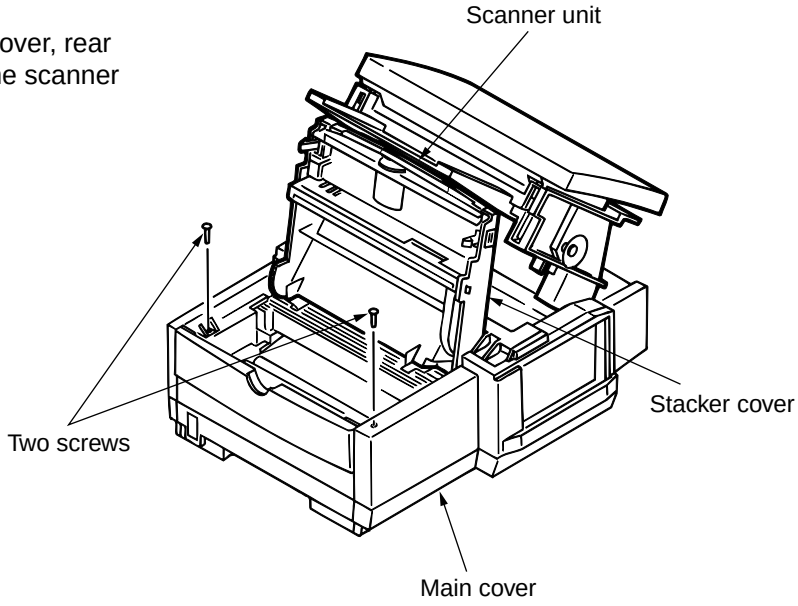
4.3.2 Rear Cover and NCU Cover

1. Unscrew two screws (1).
2. Slide the rear cover up slightly and pull it forward for removal.
3. Remove the NCU cover by unscrewing one screw (2).



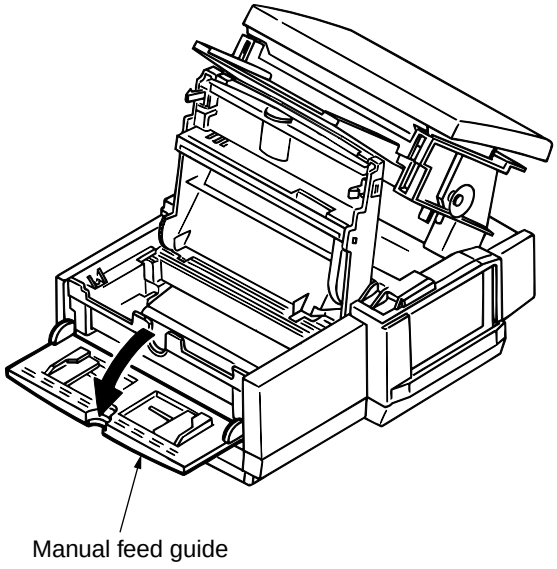
4.3.3 Main Cover

1. After removing the document cover, rear cover, and NCU cover, open the scanner unit and stacker cover.

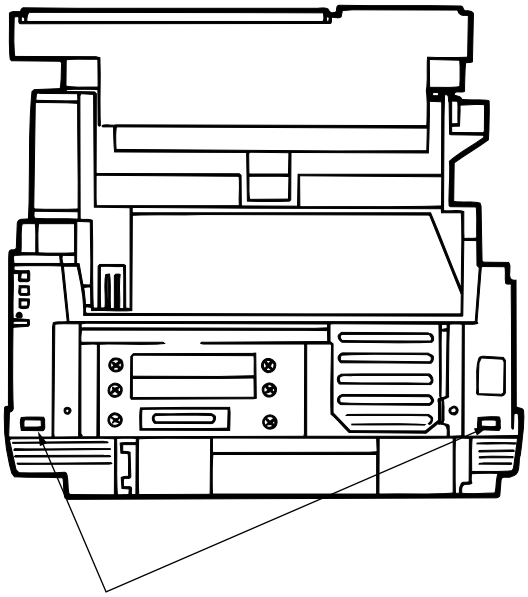


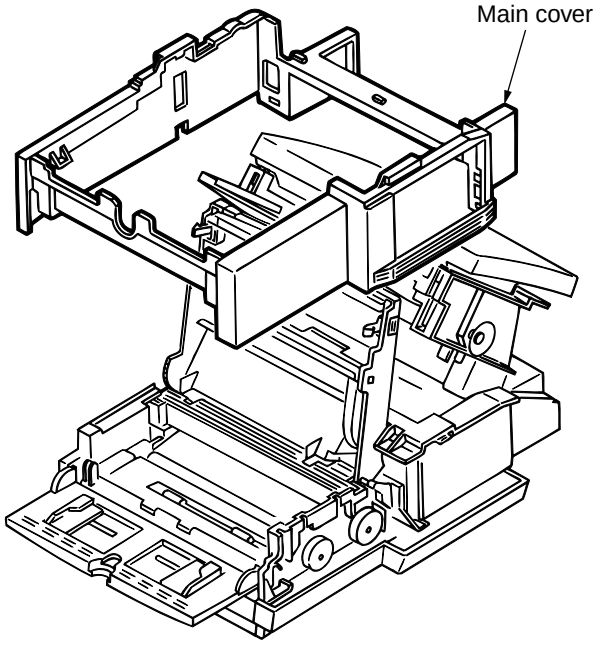
2. Unscrew two screws.

3. Open the manual feed guide.



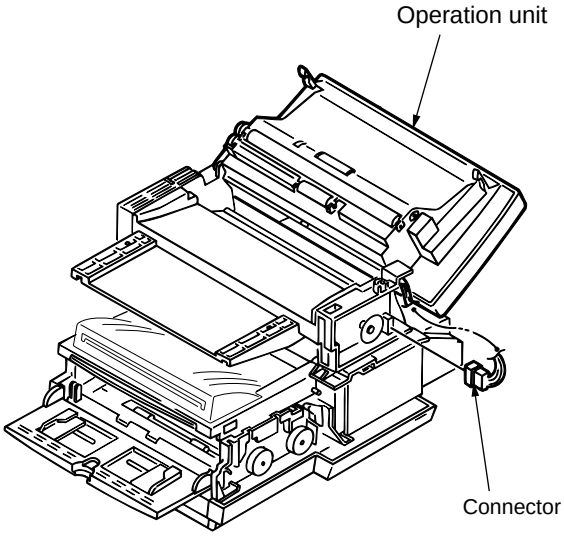
4. First, disengage the two hooks at the back. Next, remove the main cover with it lifted.



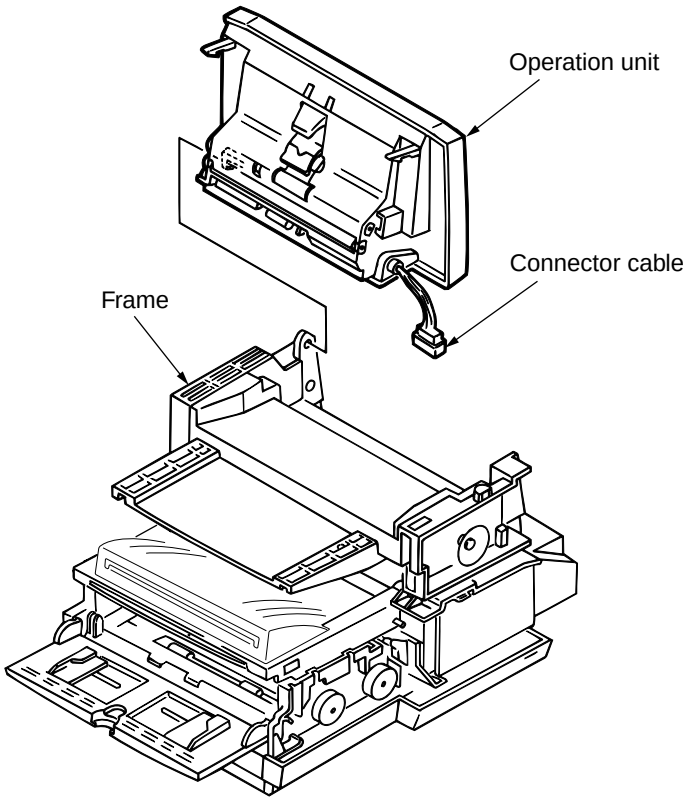


4.3.4 Operation Unit

1. Disconnect the connector.



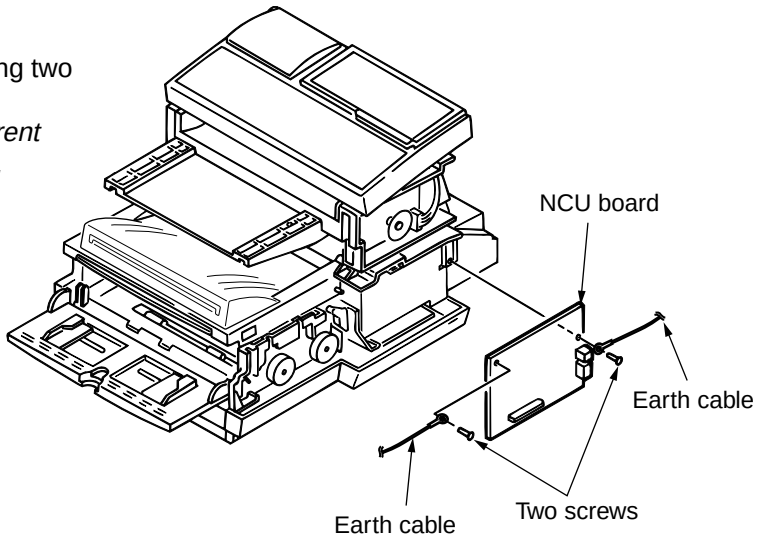
2. Open the operation unit and slide it leftward for removal.
   Caution: Pull out the connector cable from the frame.



4.3.5 NCU Board

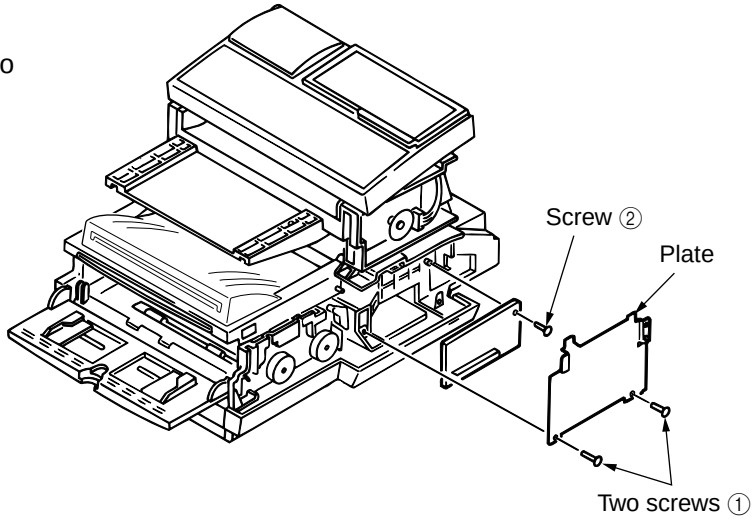
Remove the NCU board by unscrewing two screws.

Caution: Earth cable position is different from each machine version.



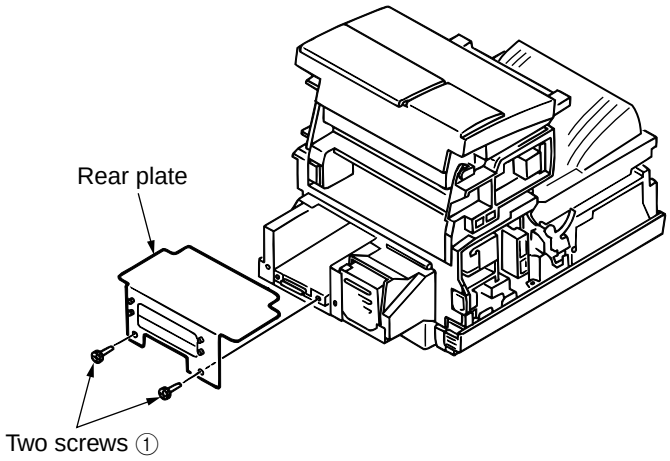
4.3.6 MODEM Board

1. Remove the plate by unscrewing two screws (1).
2. Remove the MODEM board by unscrewing one screw (2).

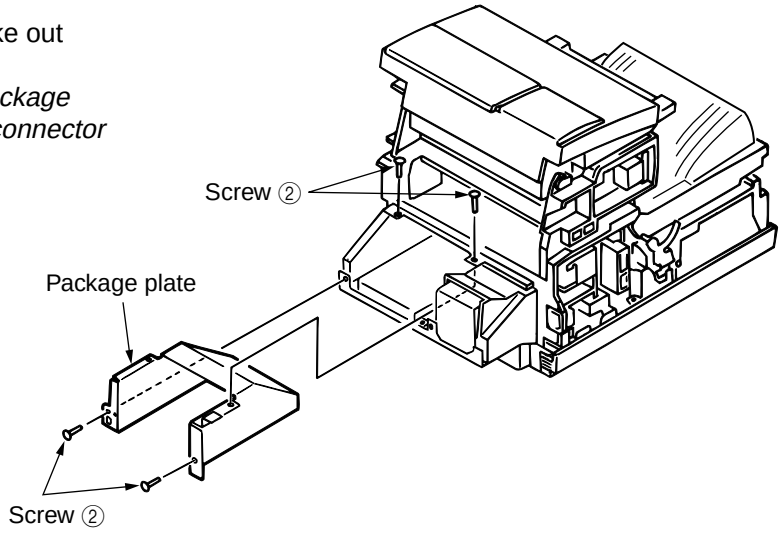


4.3.7 Plate Package

1. Unscrew two screws (1) and pull out the rear plate.

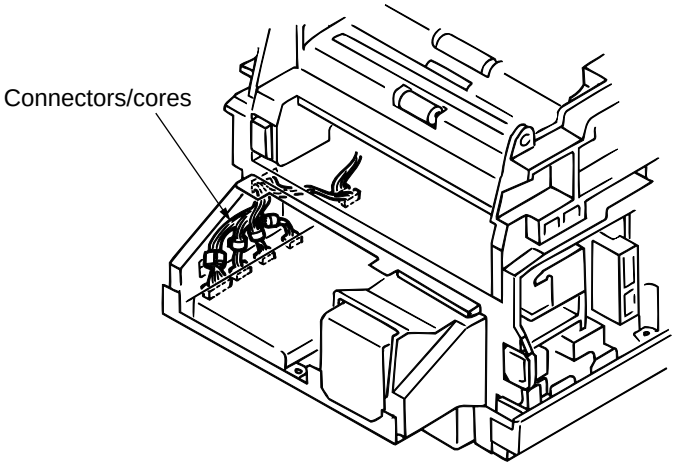


2. Unscrew four screws (2) and take out the package plate.
   Caution: Before take out the package plate, disconnect the connector of Battery.

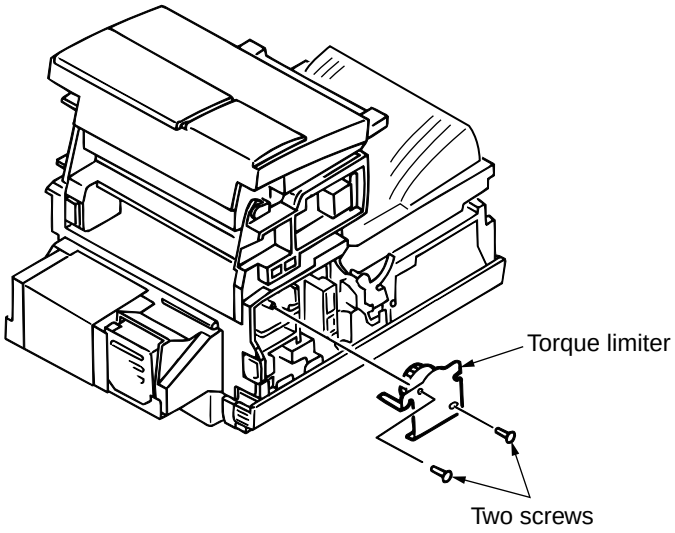


4.3.8 Scanner Unit (CIS)

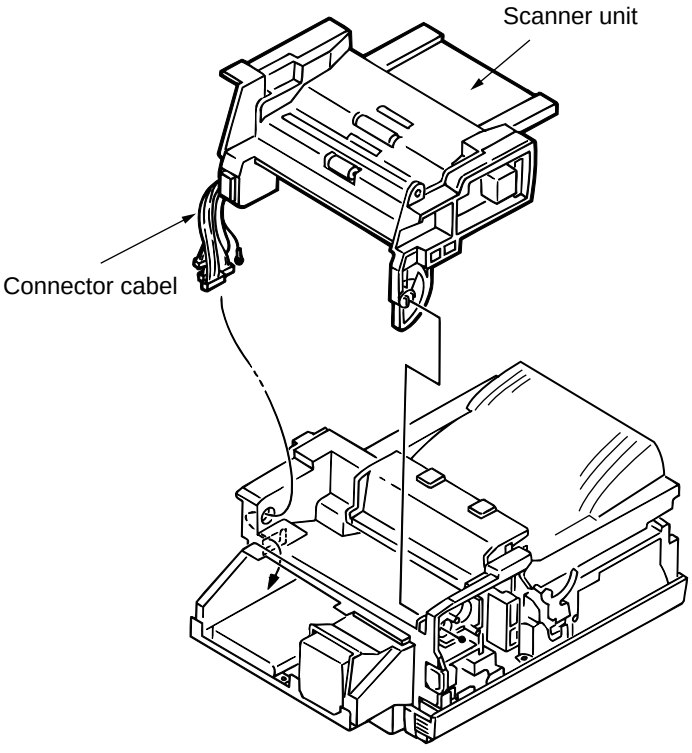
1. Disconnect six connectors (CN8, 9, 13, 14, 15 and SP)
2. Remove four cores.



3. Remove the torque limiter by unscrewing two screws.

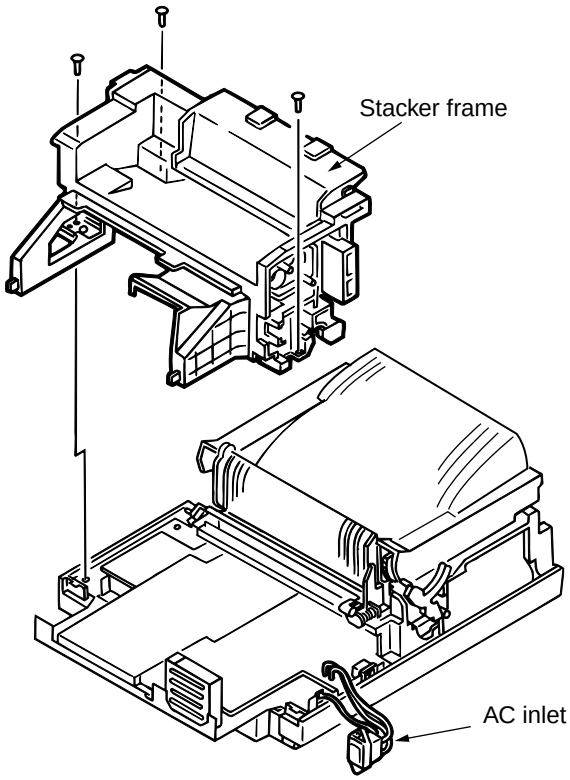


4. Pull out the connector cable from the stacker frame and remove the scanner unit.



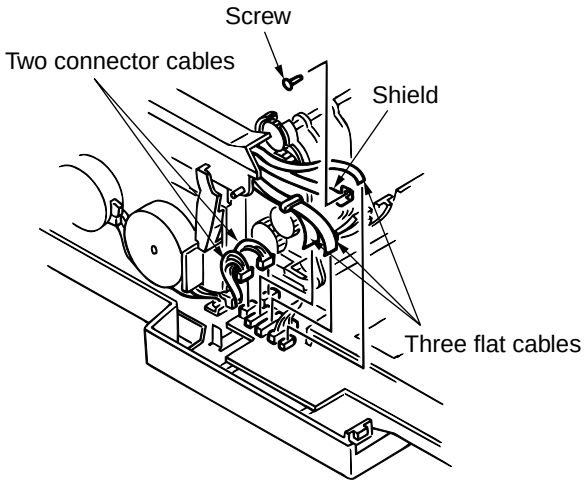
4.3.9 Stacker Frame

Remove the AC inlet and unscrew three screws to remove the stacker frame.



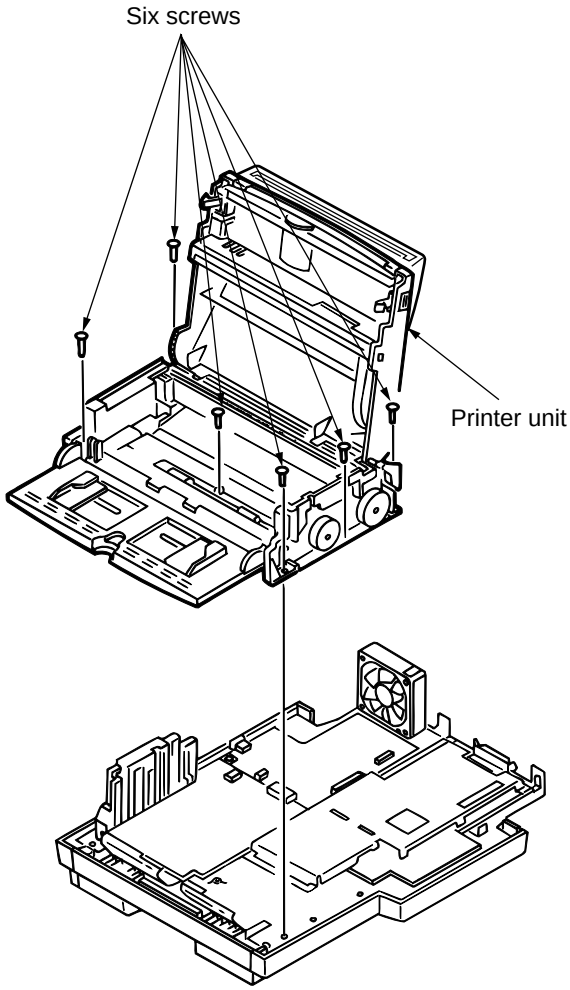
4.3.10 Printer Unit

1. Disconnect three flat cables and two connector cables
2. Remove the shield by unscrewing one screw.



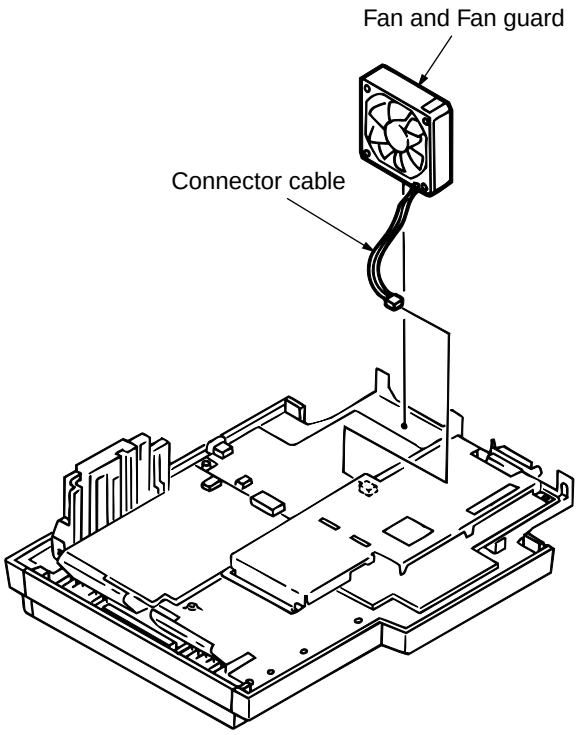
3. Remove the printer unit by unscrewing six screws.

Caution: The number of pins of the CN2 connector is the same as that of the CN3 connector; however, colors of these connectors are different (CN2 is yellow and CN3 is white). When connecting these connectors, pay attention to their colors.



4.3.11 Fan and Fan guard

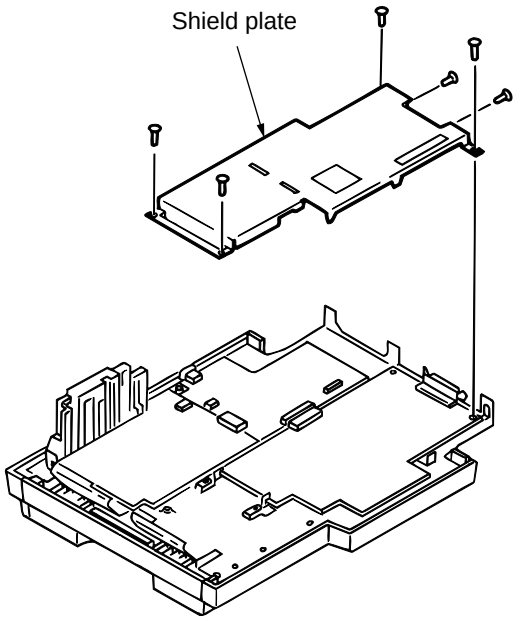
Disconnect the connector cable and remove the fan and Fan guard.



4.3.12 Main Board

1. Remove the shield plate by unscrewing six screws.

2. Unscrew four screws and disconnect two connector cables, then slide the main board for removal.



4.3.13 Contact Assembly and High-/ Low-voltage Power Supply Boards

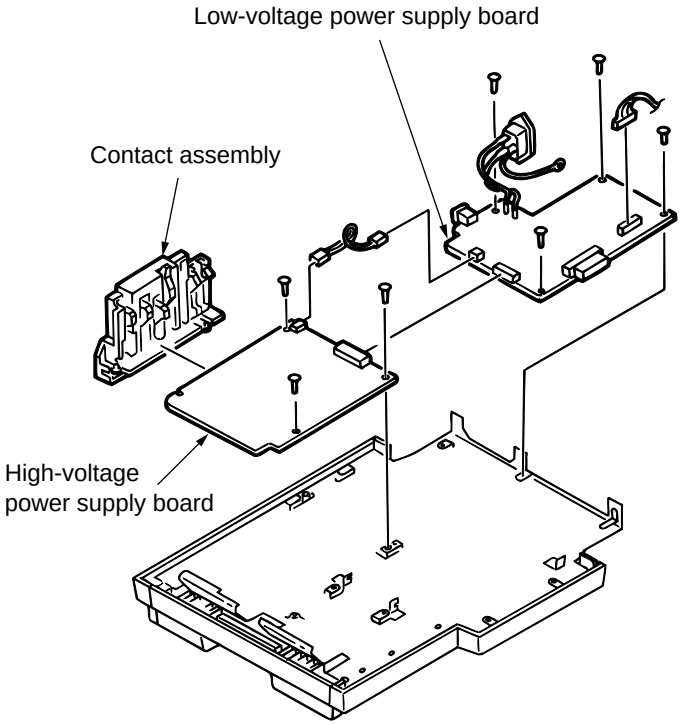
1. Remove the high-/low-voltage power supply boards by unscrewing seven screws.

Caution: Remove both boards at the same time. Unscrew one ground screw and remove the ground cable from the Base Plate.

2. Disconnect two connectors to separate two boards.

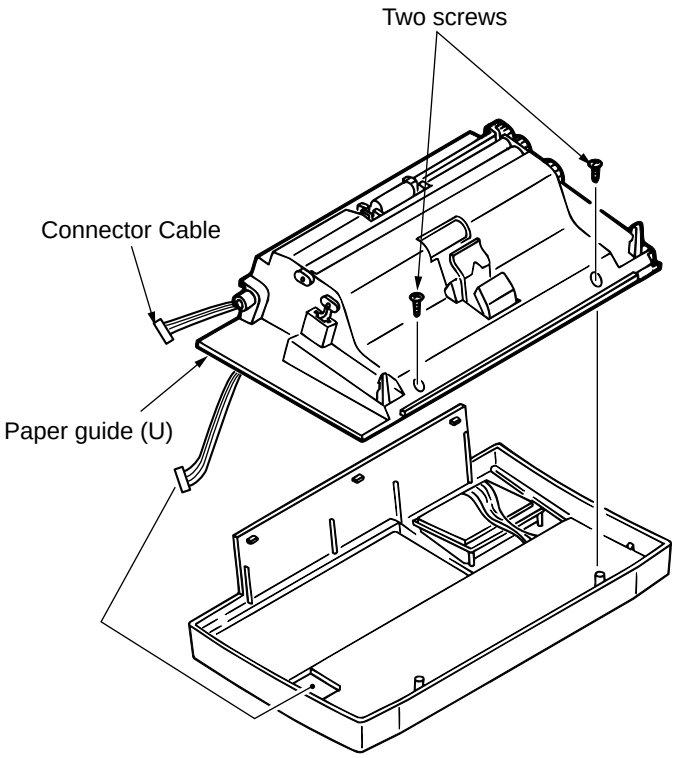
3. Remove the contact assembly.

Caution: Never touch the pattern on the low-voltage board.

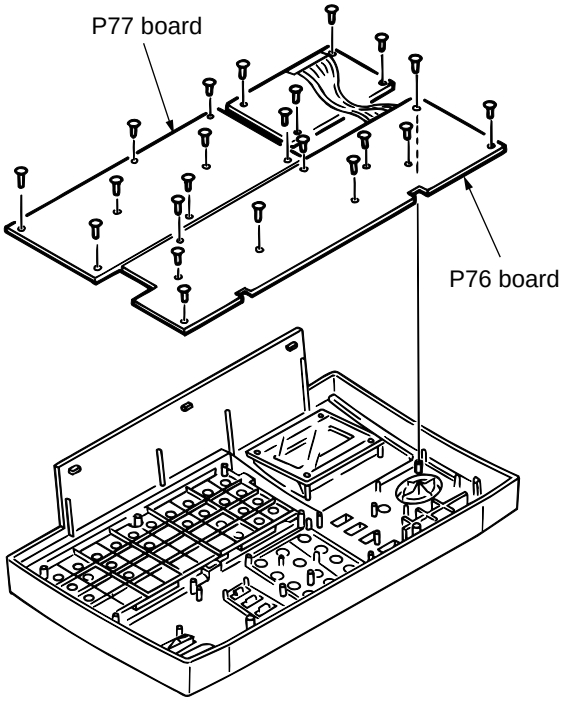


4.3.14 Disassembling the Operation Unit

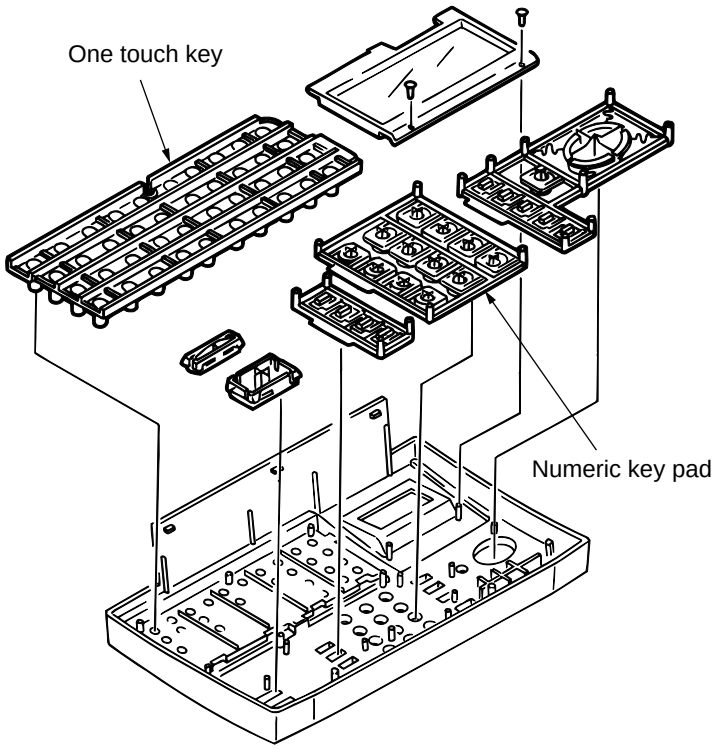
1. Remove the paper guide (U) assembly by unscrewing two screws and disconnecting the connector.



2. Unscrew 22 screws and disengage six hooks to remove the P76/P77 board assembly.

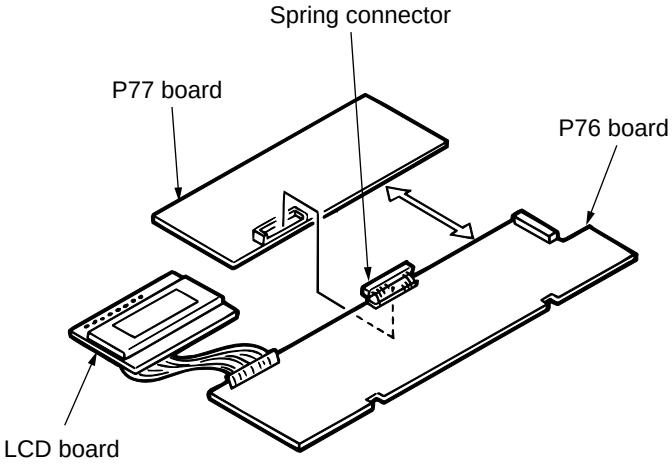


3. Remove the numeric key pad.



4. Disconnect the white connector to separate the P76 board from the P77 board.

   Caution: The white connector is a spring connector. Be careful not to damage the connector when disconnecting it.

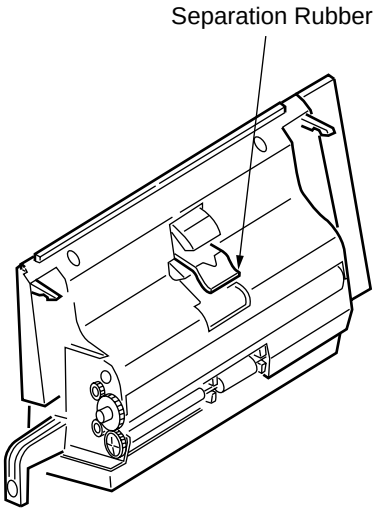


4.3.14.1 Disassembling the Operation Unit

Paper guide (U) Assembly

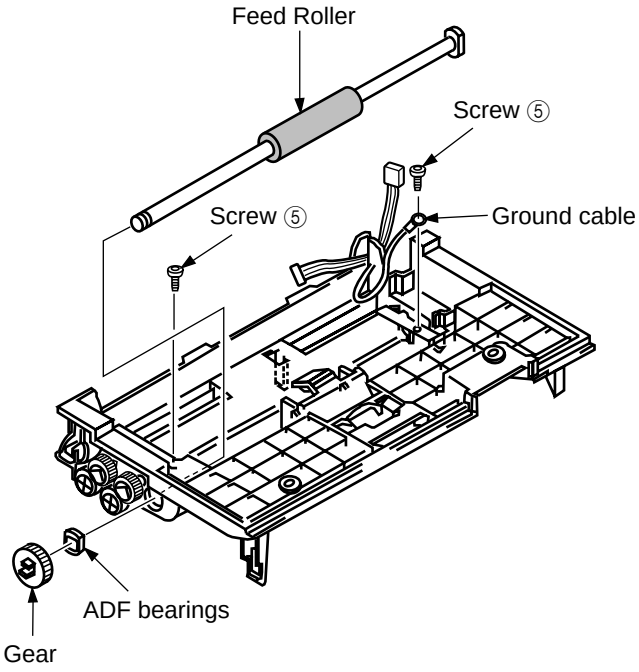
Separation Rubber

The Separation Rubber can be removed from the Paper Guide (U) Assembly.



Feed Roller

1. Remove the ground cable by removing the two screws 5.
2. Remove the Feed Roller by removing the gear and ADF bearings.



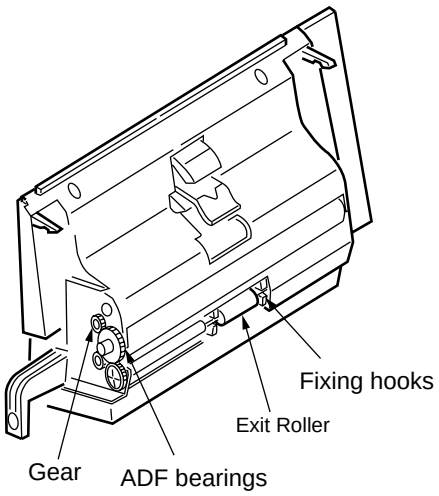
Scan Roller

Remove the Scan Roller by removing the gear and ADF bearing.

Exit Roller

Remove the Exit Roller while spreading and holding up the part of the fixing hooks.

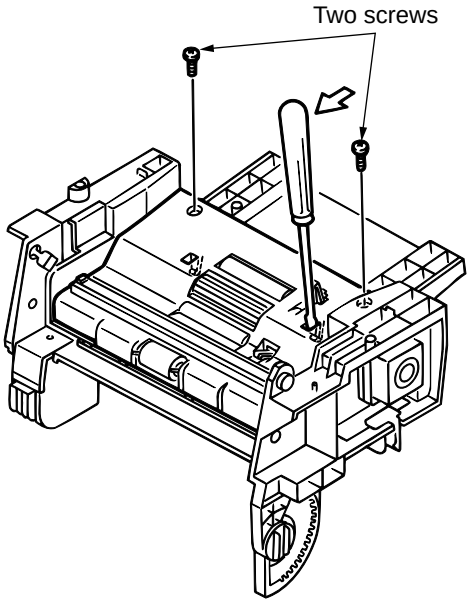
Caution: Be careful as not to break the shaft of the Exit Roller when removing.



4.3.15 Disassembling the Scanner Unit (L)

Paper Guide

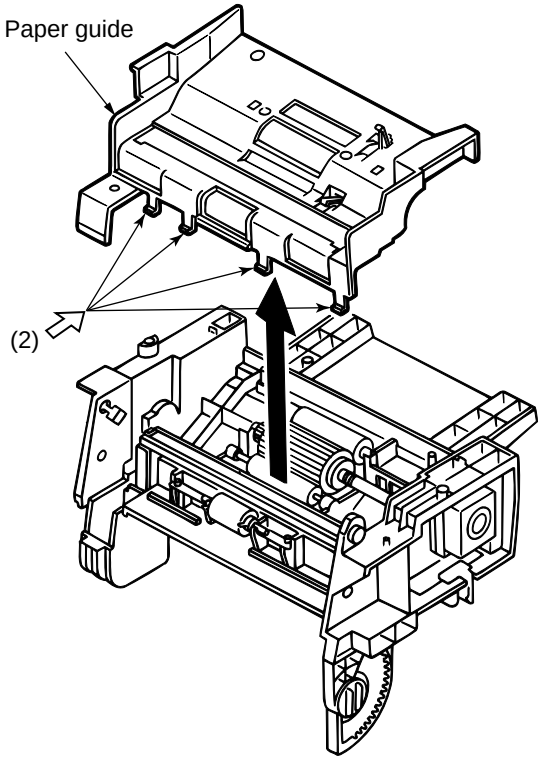
Unscrew two screws and remove the paper guide.



(Removing the Paper Guide)

1. Insert the screwdriver in the holes (two) in the paper guide and push the screwdriver in the direction of the arrow (1) to release the hooks.

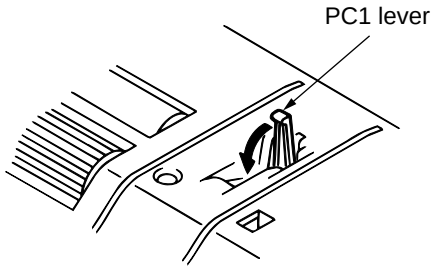
2. While pressing on the portion indicated by the arrow (2) with fingers, lift the paper guide for removal.



(Precaution for Installing the Paper Guide)

Install the paper guide while pressing the PC1 lever.

* This is necessary to prevent the lever from sticking.

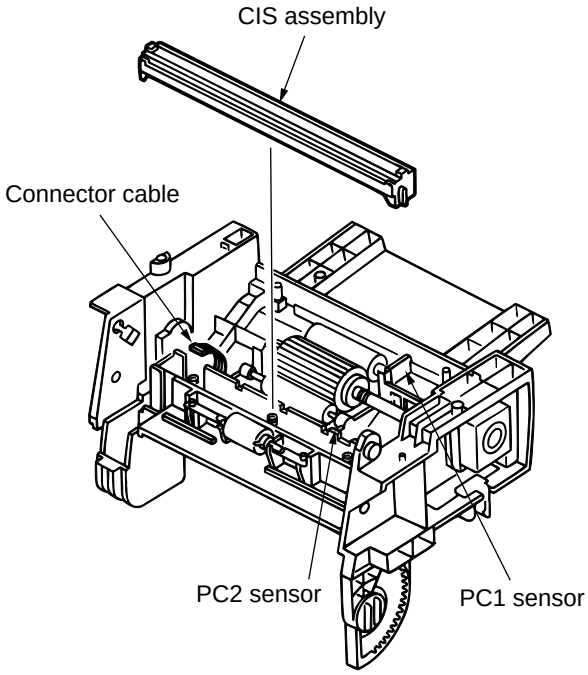


4.3.16 Scanner (CIS)

1. Remove the CIS assembly by disconnecting one connector.
2. Remove the CIS from the bracket. (* Disengage the hook on the side where there is no connector.)

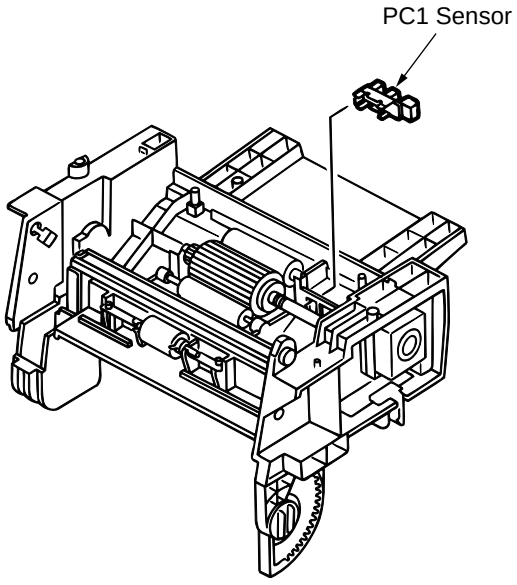
   Caution: Pay attention to the orientation when reassembling it.

   Caution: Be careful not to damage the cable when disconnecting. (The cable is very thin.)

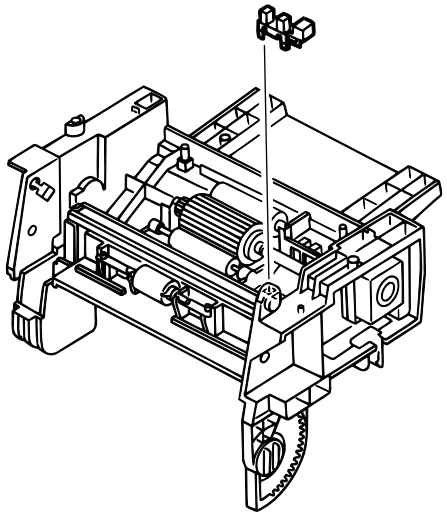


4.3.17 PC1/PC2 Sensors

1. Disengage four hooks and remove the PC1 sensor.



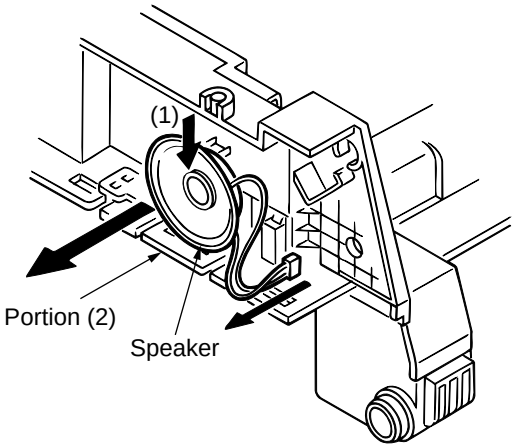
2. Pull out the PC2 sensor.



4.3.18 Speaker

Remove the speaker with it pushed in the direction of the arrow (1), then disconnect the cable.

Caution: Be careful not to damage the portion (2) of the frame indicated by the arrow.

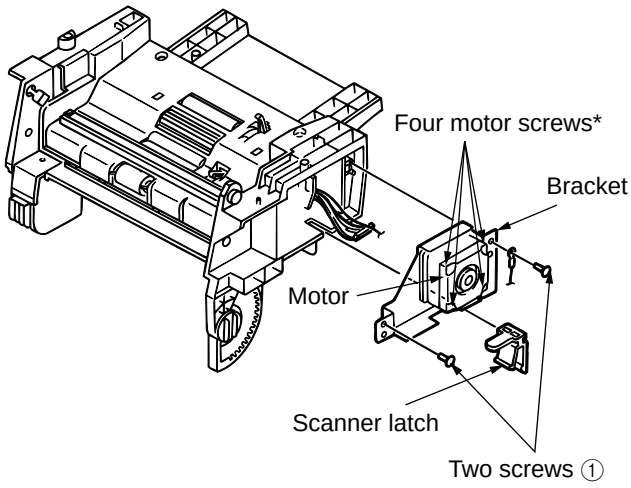


4.3.19 Scanner Motor

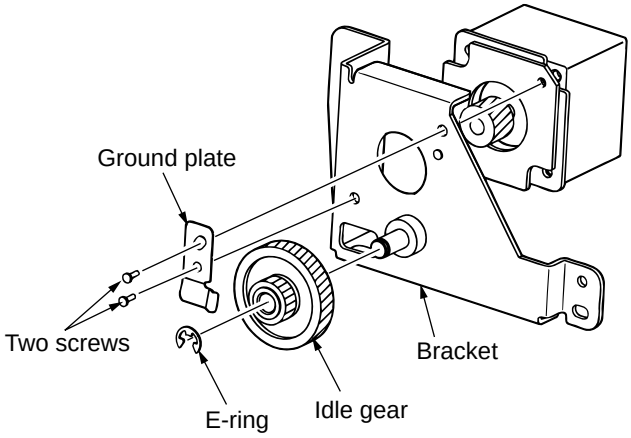
1. Remove the scanner latch.

2. Remove the motor cable and unscrew two screws (1) to remove the motor along with the bracket.

   Caution: Do not remove the four screws securing the motor.*

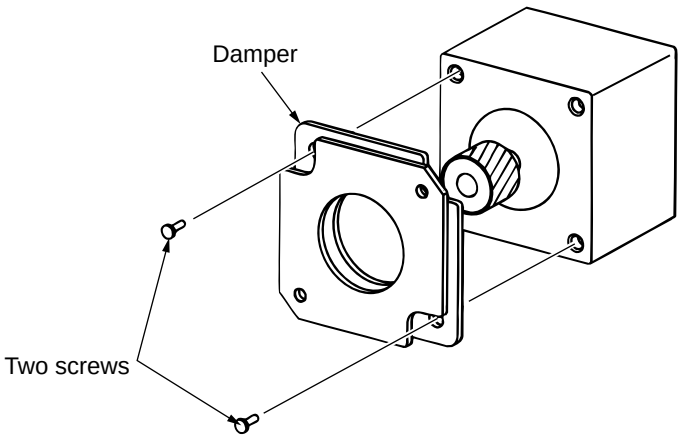


3. Remove the bracket and ground plate by unscrewing two screws.
   Remove the Idle gear by releasing the E-ring.



4. Remove the damper by unscrewing two screws.

   Caution: As a maintenance part, the damper is available separately from the motor. Keep the damper without throwing it away.



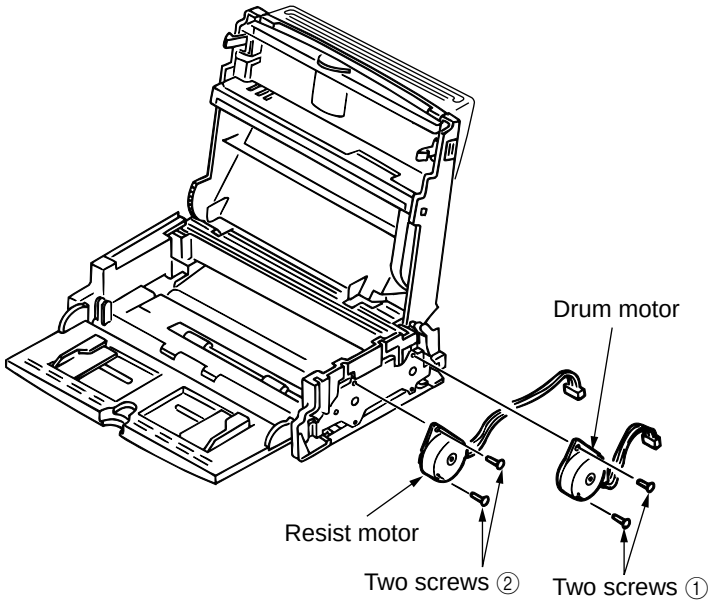
Precautions for Installation

1. When installing the damper, pay attention to its orientation and screw positions.
2. When installing the bracket and ground plate, check for their positions.

4.3.20 Disassembling the Printer Unit

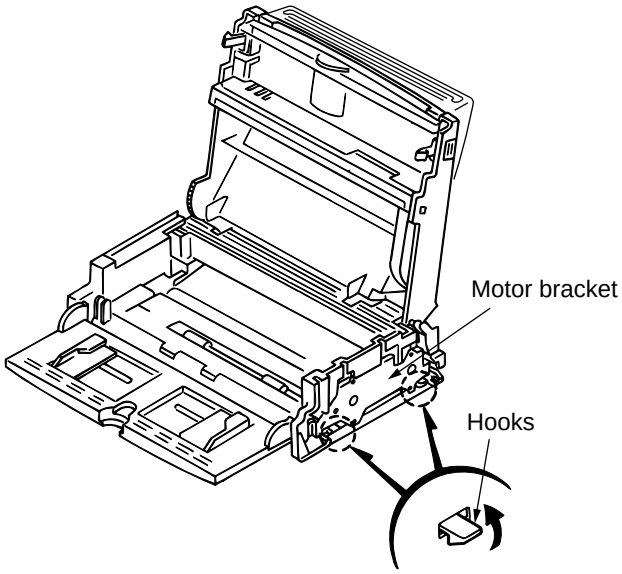
Drum/Resist Motor

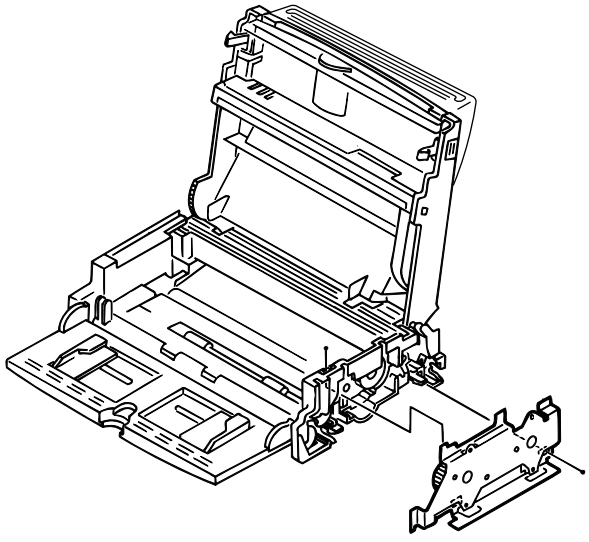
1. Remove the drum motor by unscrewing two screws ①.
2. to Remove the resist motor by unscrewing two screws ②.



Motor Bracket

Remove the bracket by releasing two hooks.

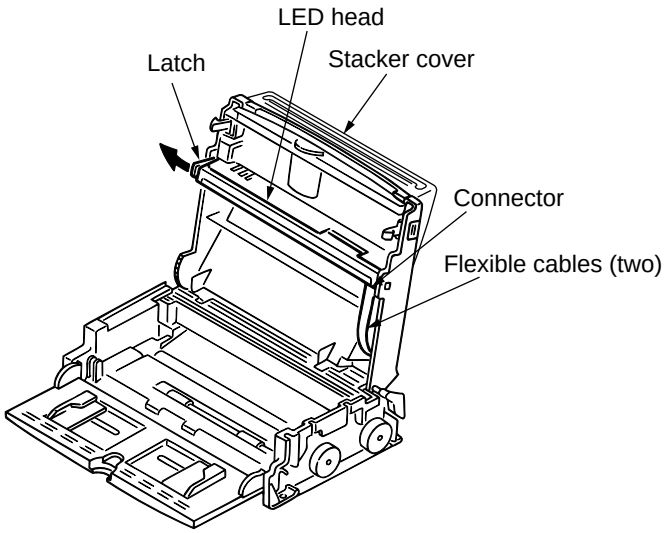


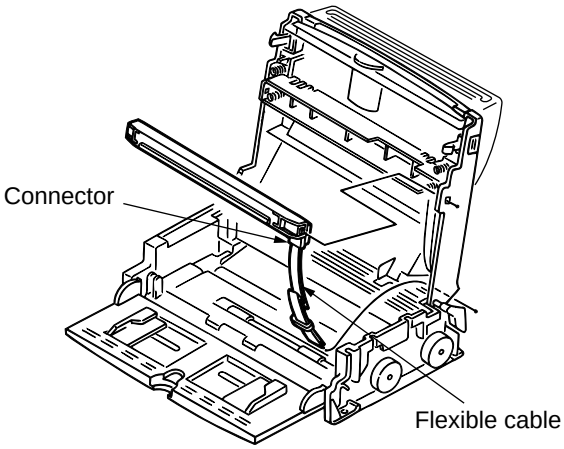


4.3.21 LED Head

1. Open the stacker cover and open the left-hand latch slightly to pull the LED head out. Next, disconnect flexible cables (two) along with connectors.

   Caution: Disconnect the flexible cables with them inserted in connectors.

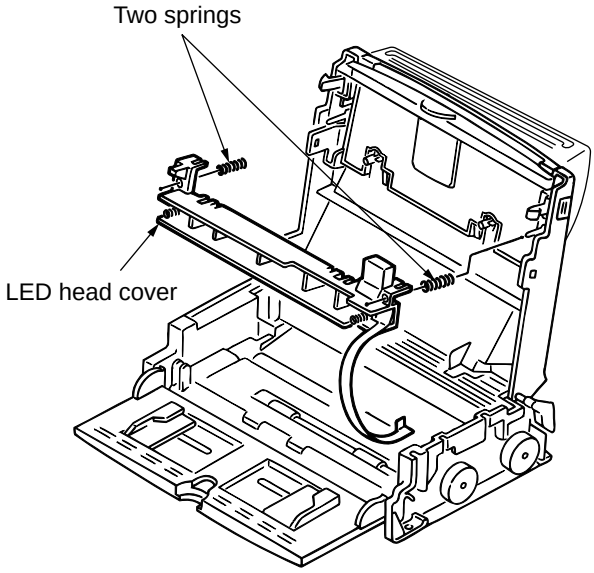




4.3.22 ID/Toner Lockout Board

1. Remove two springs, pull the shield toward you, and remove the LED head cover.

   Caution: Do not lose the springs.

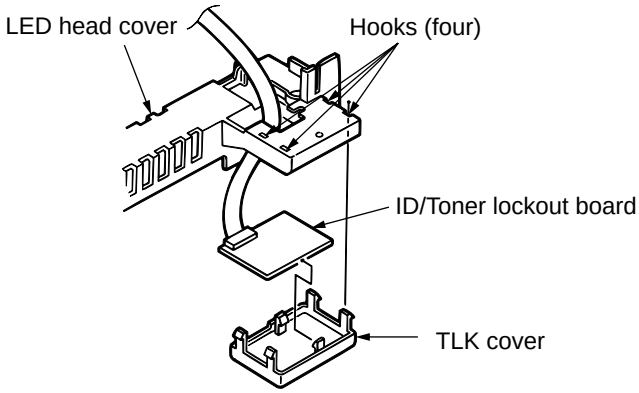


2. Remove the TLK cover by releasing hooks (four).

   Caution: Pay attention to two springs.

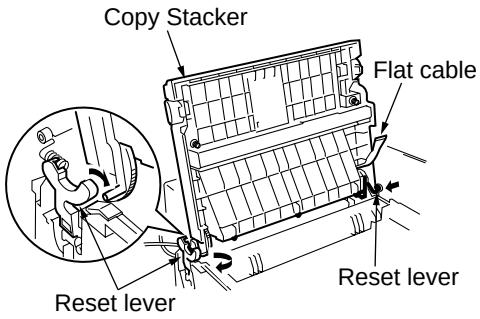
3. Remove the board by releasing hooks (two).

   Caution: Do not break the hooks. Be careful not to loose the springs.



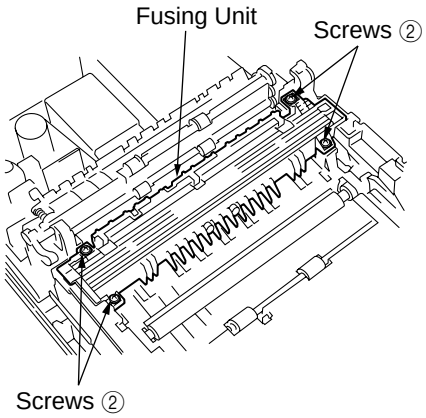
4.3.23 Stacker Cover

1. Disconnect the flat cable.
2. Remove the Copy Stacker by pressing inward the two latches on it from the two reset levers.
3. Remove the Copy Stacker by spreading it from the lower base.



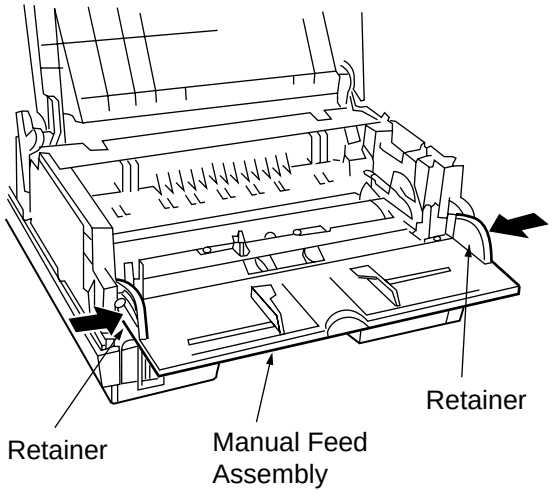
4.3.24 Fusing Unit

Remove the Fusing Unit by removing the four screws ②.



4.3.25 Manual Feed Assembly

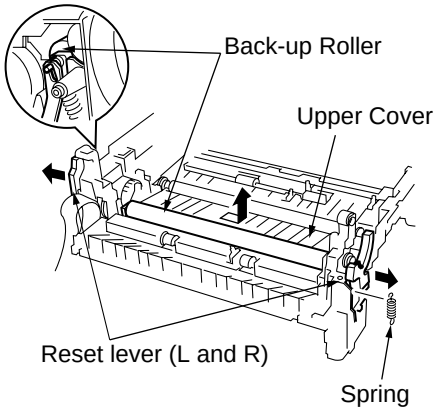
1. First, carry out the disassembly procedure up to the point of Main Cover removal. (Refer to susection 4.3.3)
2. Remove the Manual Feed Assembly by pressing inward the two retainers.



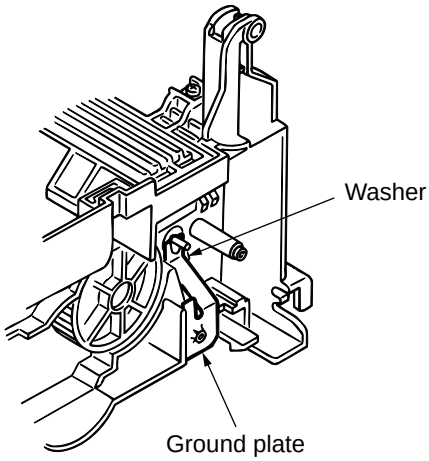
4.3.26 Back-up Roller, Transfer Roller

1. After removing the Lower Base, remove the spring.

2. Lift the left side of the Back-up Roller and pull it out leftwards.

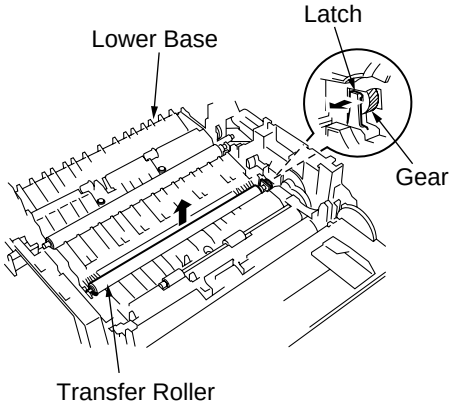


Caution:
- *Do not lose the ground washer.*
- *Do not bend the ground plate.*
- *Do not damage the backup roller.*



3. Release the gear by unlocking the latch on the Lower Base.

4. Lift the right side of the Transfer Roller and shift rightwards, then pull it out from the Lower Base.



4.3.27 Resist Roller, Hopping Roller, Sensor Plates

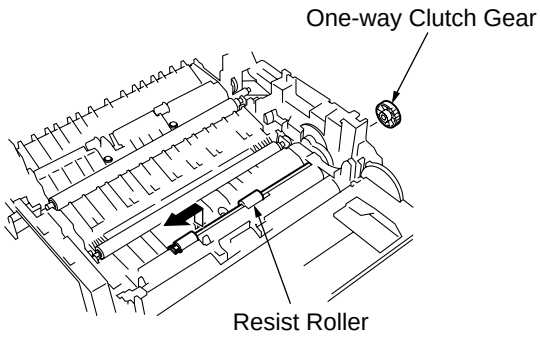
(1) Disassembly procedure

1) Resist Roller, Hopping Roller

1. First, carry out the disassembly procedure up to the point of the Lower Base removal.
   (Refer to sub-item 4.3.23.)

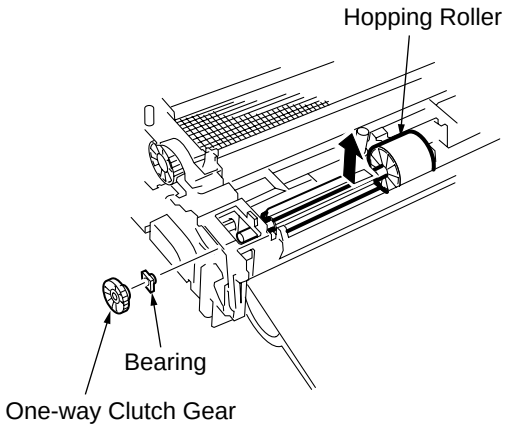
2. Remove the One-way Clutch Gear.

3. Press the Resist Roller to the right side and lift up the left side of it, then take off the Resist Roller.



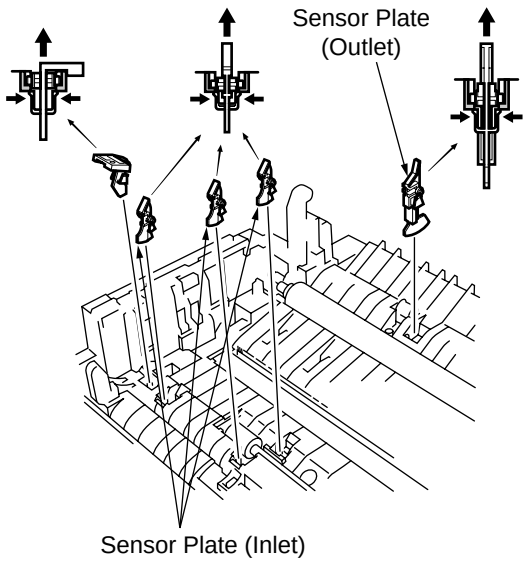
4. Remove the One-way Clutch Gear and Bearing.

5. Remove the Hopping Roller by sliding to the right side.



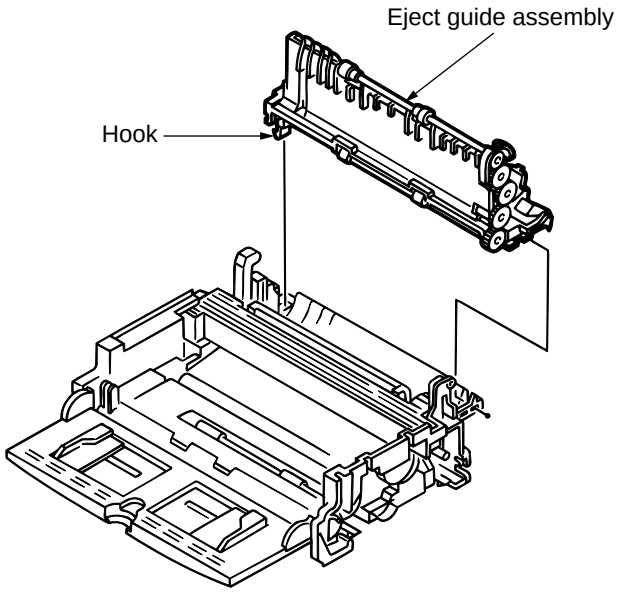
2) Sensor Plates (Inlet, Outlet), Toner Sensor

1. After removing the Lower Base, remove the Sensor Plate by pressing and holding the latches while shifting the Sensor Plate up and out.



4.3.28 Eject Guide Assembly

Remove the eject guide assembly by releasing the left-hand hook.



Reassemby Procedure

Carry out reassembly by reversing the disassembly procedure.

5. ADJUSTMENTS

5.1 Setting of LED Print Head Drive Time

• Adjustment point: Technical Function: Setup No. 26

* To bring the LCD up to Technical Function, press MENU key once, RESOLUTION key twice (In case of no message in memory).

Note: When the rank marking of the replaced LED print head (new part) is the same as that of the used LED print head (old part), you do not always have to set the LED print head drive time.

Adjustment:

1) Turn AC power ON.
2) Setting of LED print head should be according to the Table 5.1.1 below:

Table 5.1.1 Setting of Technical Function: Set up No. 26

Setting / Rank Marking	MSB ↕ LSB																														
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1
		0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
		0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
		0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
085 —											*																					
080 — 084												*																				
074 — 079													*																			
070 — 073														*																		
065 — 069															*																	
061 — 064																*																
058 — 060																	*															
053 — 057																		*														
050 — 052																			*													
047 — 049																				*												
044 — 046																					*											
041 — 043																						*										
038 — 040																							*									
036 — 037																								*								
033 — 035																									*							
031 — 032																										*						
029 — 030																											*					
027 — 028																												*				
— 026																													*			

Note1: The luminous intensity ranking is determined by the first, second and third digits from the right in the LED print head (i.e. in ---XX061, 061 is the luminous intensity ranking.)

Note2: When the head label of the replaced LED print head (new part) is the same as that of the used LED print head (old part), you do not always have to set the LED print head width by technical function: Set up No.26. (Refer to table 2.9.2.3, TF No.26)

5.2.1 Confirmation Items

The clock frequency and power voltage of the machine are not possible to adjust in the field. However, their measurement procedures are described here for confirmation of clock frequency and each voltage.

1) Clock Frequency
   - Measurement point: E76 board; R180-2 pin and ground terminal
   - Specification: 20.000 MHz ± 50 PPM

   Note: If the counter does not read with 20.000 MHz, replace with a new crystal oscillator (X1).

2) +5V DC Voltage (SUB)
   - Measurement point: E76 board; CN1-A8 pin and ground terminal
   - Specification: +5.2V ± 4%

3) +5V DC Voltage
   - Measurement point: E76 board; CN1-B10, A11, B11 and A12 pin and ground terminal
   - Specification: +5.1V ± 4%

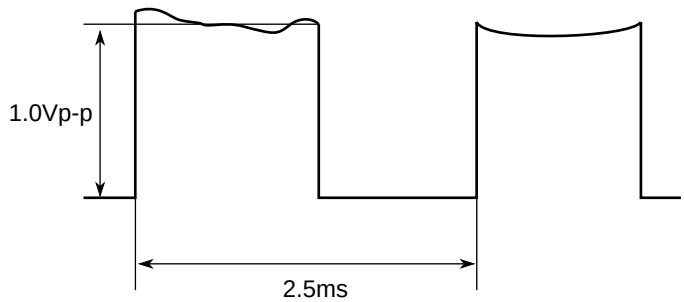
4) +8V DC Voltage
   - Measurement point: E76 board CN1-A16 pin and ground terminal
   - Specification: +8V ±4%

5) –8V DC Voltage
   - Measurement point: E76 board; CN1-B15 pin and ground terminal
   - Specification: –8V ±4%

6) +24V DC Voltage
   - Measurement point: E76 board; CN1-B6 pin and ground terminal
   - Specification: 22V to 27V

7) +38V DC Voltage
   - Measurement point: E76 board; CN1-B12, A13 and B13 pin and ground terminal
   - Specification: +26V to +45V

8) Contact Image Sensor Output (SIG signal)
   - Measurement point: E76 board; CN13-1 pin and ground terminal
   - Specification: A waveform sample is shown below.
   - Test chart: White sheet (A4 size)



5.2.2 Measurement

1) Trun the AC power OFF.
2) Carry out the disassembly procedure up to Cover assembly-top, Frame assembly-scanner, and Unit-printer.
   (Refer to the Mechanical Disassembly and Reassembly in Chapter 4.)
3) Connect extension cables to the E76 board.
4) Connect the frequency counter (for clock frequency), digital voltmeter (for power voltage) and Oscilloscope (for SIG signal). See figure 5.2.1.
5) Turn AC power ON.
   Main power supply is set to "ON" (PC1 ON) by loading the document on the cover-top. (except +5V SUB)
6) Measurement
7) Turn the AC power OFF.
8) Reverse the disassembly procedures.

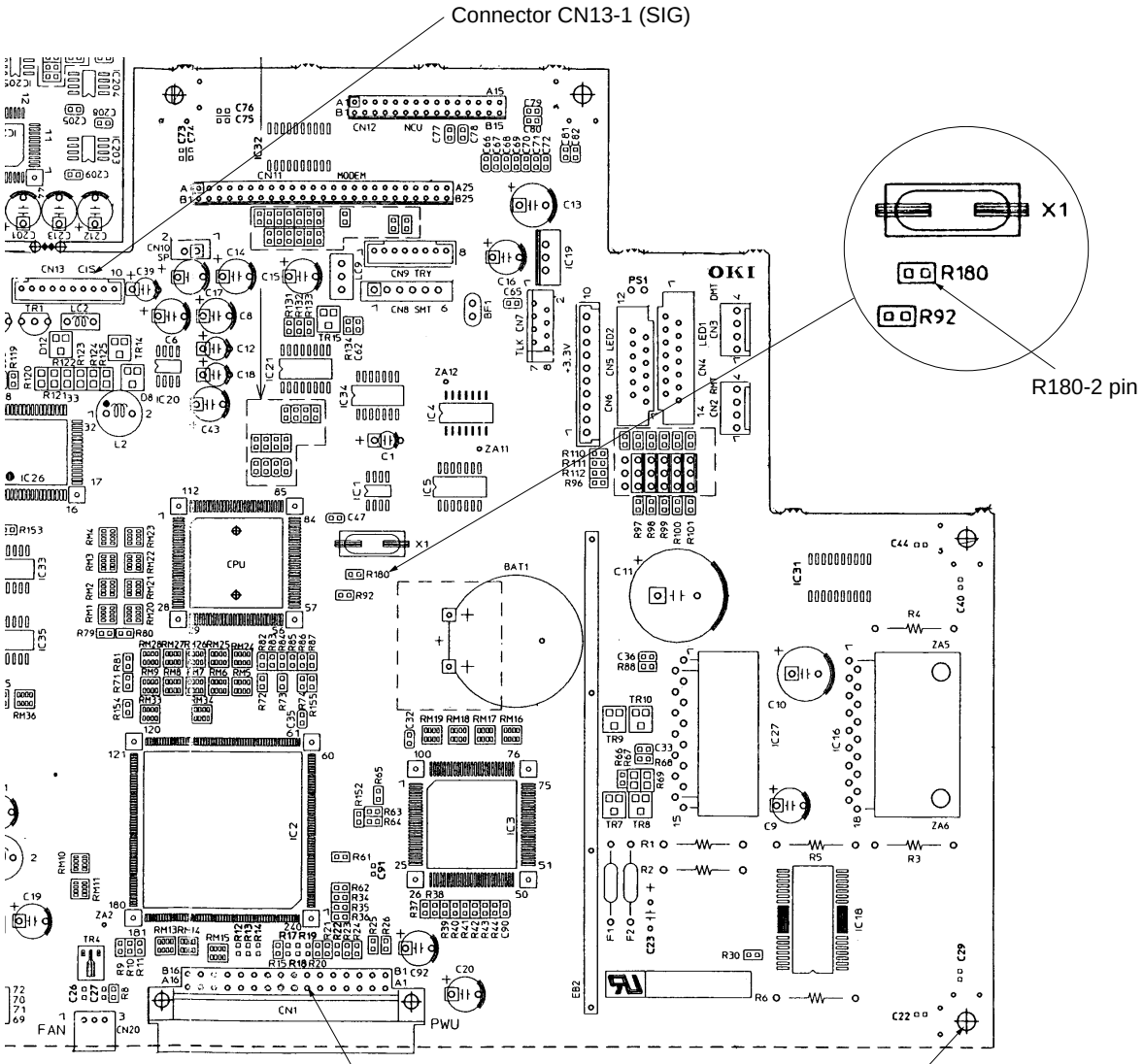


Figure 5.2.1 Measurement Points on E76 Board

6. CLEANING AND MAINTENANCE

6.1 Replacement of Consumable

The user (or service personnel) is required to replace the following items as consumable parts.

(1) User side

No.	Part name	Expected Use Before Replacement	Reference Item No. in Fig.6.1
1	Toner Cartrige	5,000 sheets/4% duty (ITU-T document sample No.1) (For the second or later cartridge to a new I/D Unit) * The first toner cartridge installed in a new I/D unit will have a decreased yield.	(1)
2	I/D Unit (Image drum unit)	9,000 sheets: 1 page/job, 14,000 sheets: 3 page/job, 20,000 pages/continuous	(2)

(2) Service personnel side

No.	Part name	Expected Use Before Replacement	Reference Item No. in Fig.6.1
1	Fuser Unit	180,000 sheets	(3)
2	Separation Rubber	The Separation Rubber will not require replacement for at least 30,000 documents fed.	(4)

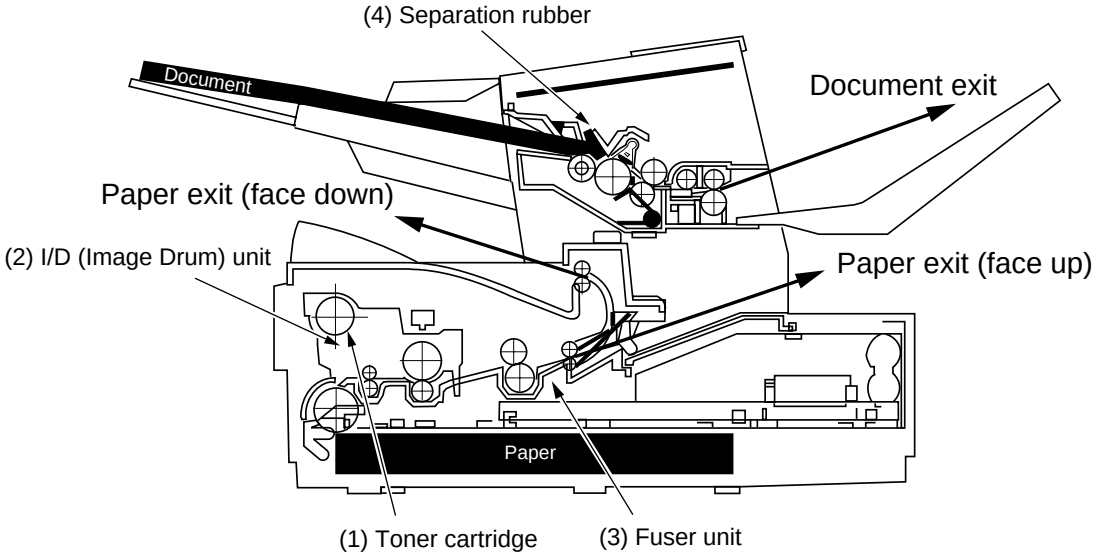


Figure 6.1 Consumable Parts

(3) Others

Table 6.1 Reliability

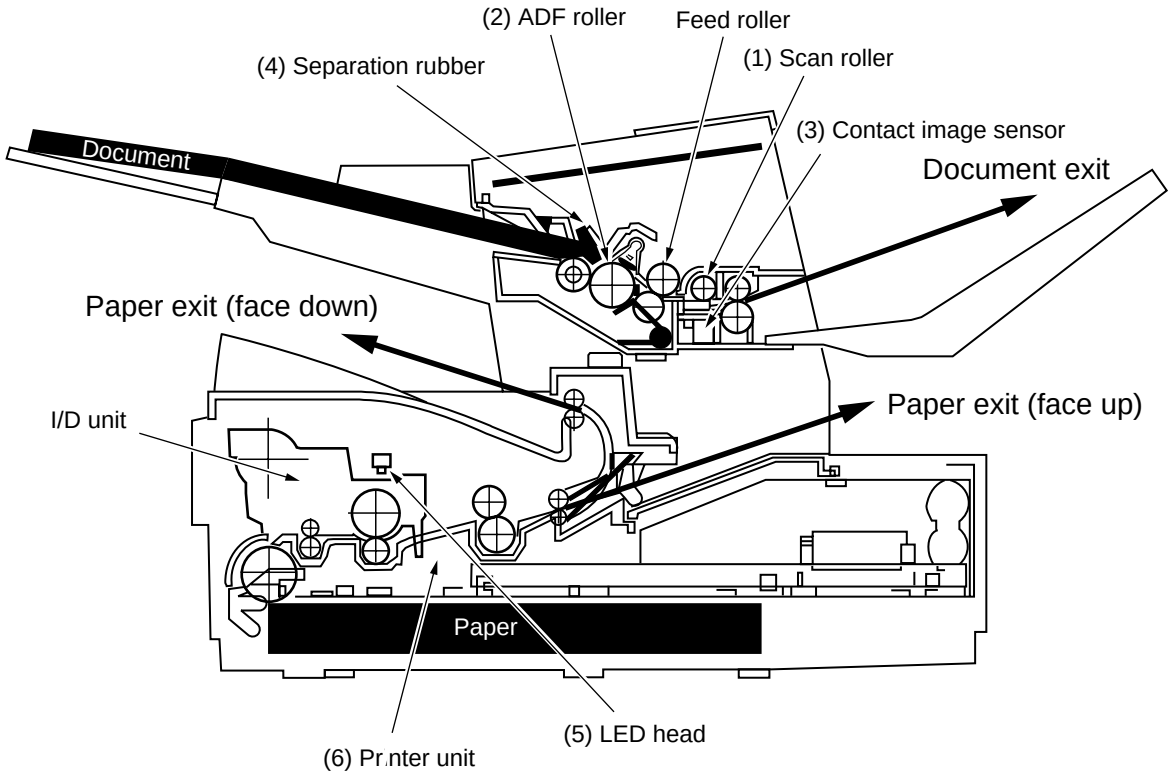
No.	Item	Specifications
1	Document feeder	Jam occurrence and misfeeds in the automatic document feeder will be less than one in 500 operations for all specified documents.
2	Recording paper feeder	Jam occurrence in the automatic paper feeder will be less than one in 1,500 operations and misfeeds will be less than one in 500 operations for all specified recording paper.
3	MTBF	The MTBF for the overall machine will exceed 3,000 hours of actual operation. The MTBF will be measured at a confidence level of 95% under controlled laboratory conditions. The MTBF will be based on 50% transmit and 50% receive activities.
4	Battery • for RTC	5 years Lithium battery: Not rechargeable.
	• for Memory	300 cycle of charge/discharge Manganese dioxide lithium battery: Chargeable.

6.2 Routine Inspection

Basically, the routine inspection of following items is performed about half-yearly (or every one year) after the machine is installed. The description of routine inspection is shown in Table 6.2.

Table 6.2 Routine Inspection

No.	Part name	Expected Use Before Replacement	Reference Item No. in Fig.6.2
1	Roller-scan	Clean with wet cloth.	(1)
2	Roller-ADF	Clean with wet cloth. If the surface of this roller becomes dirty and the dirt causes misfeeding of documents, perform this cleaning.	(2)
3	Contact Image Sensor	Check for accumulation of paper dust, etc. Clean with ethyl alcohol if necessary.	(3)
4	Separation Rubber	Clean with wet cloth. If this rubber is worn out, replace this rubber. (every one year)	(4)
5	LED print head	Clean the surface of the head by moving the tissue paper back and forth several times.	(5)
6	Printer unit	Clean the inside of the printer unit by using wet cloth.	
7	Lubrication	Apply MOLYKOTE EM-30L Greese (Made by Dow corning co., ltd.) oil to the following parts: a. Gears (every one year)	
8	Cleaning	Remove materials that have fallen from outside, if any.	



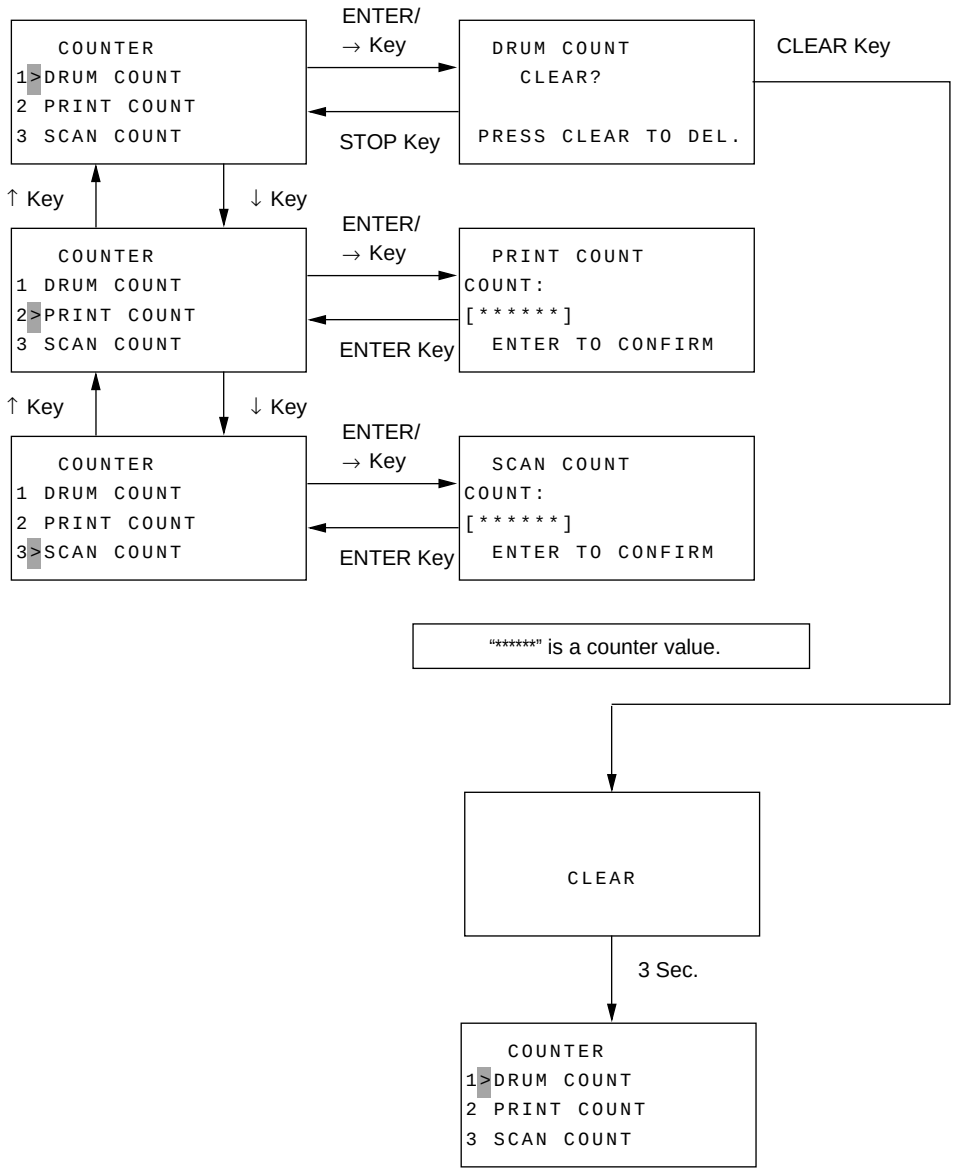
Fifure 6.2 Parts of Routine Inspection

6.3 Printer Counter Display/Clear

Note: The fonts displayed on the LCD operation panel may differ from the fonts written this manual.

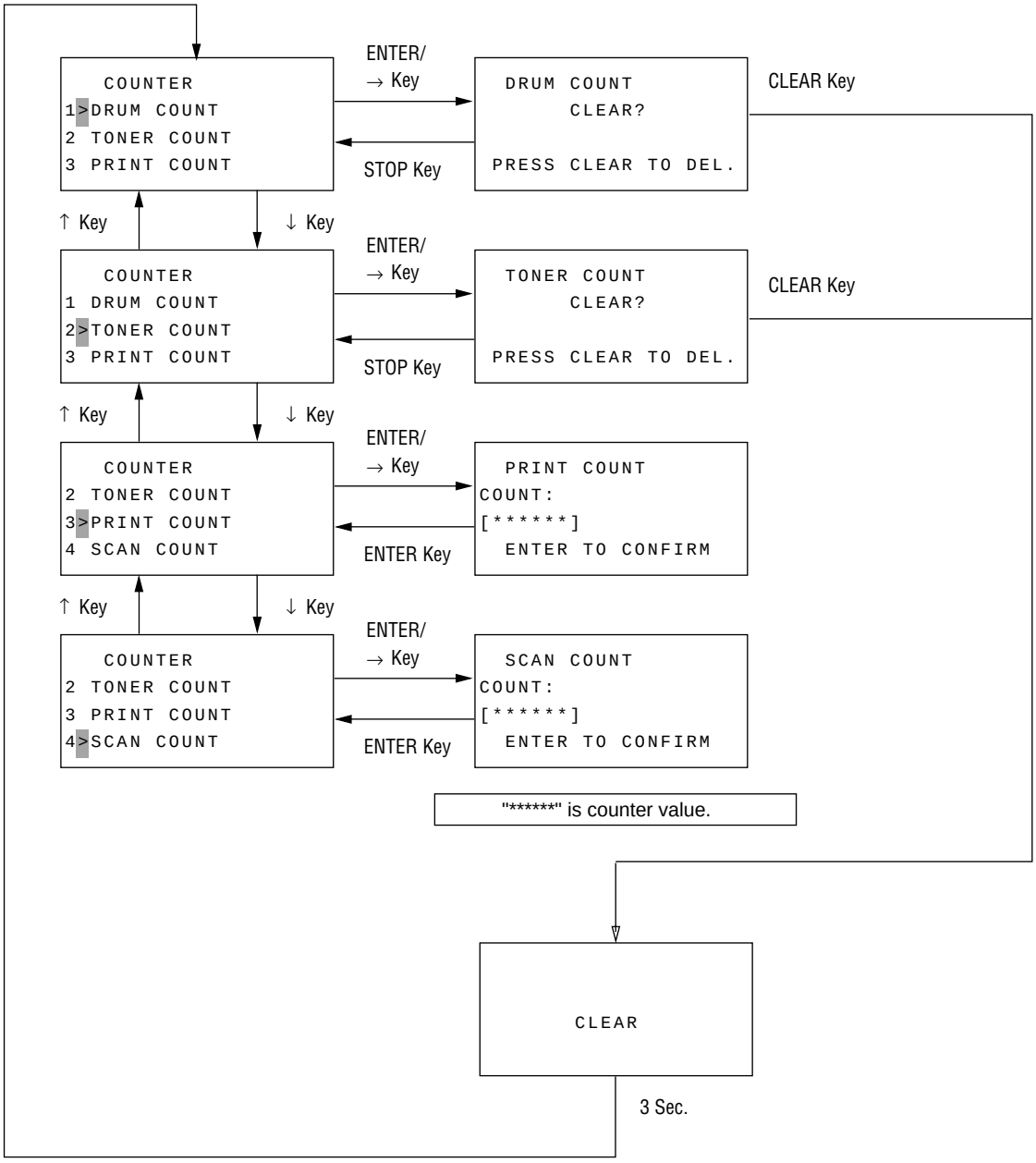
1. Purpose
   A user can clear the image drum unit and check some of the counters (such as the print counter, scan counter) by using the ¨ ENTER key or → key.

2-1. Procedure
The following shows the case when the service bit has been set OFF & TONER COUNT CLEAR = OFF.



2-2. Procedure

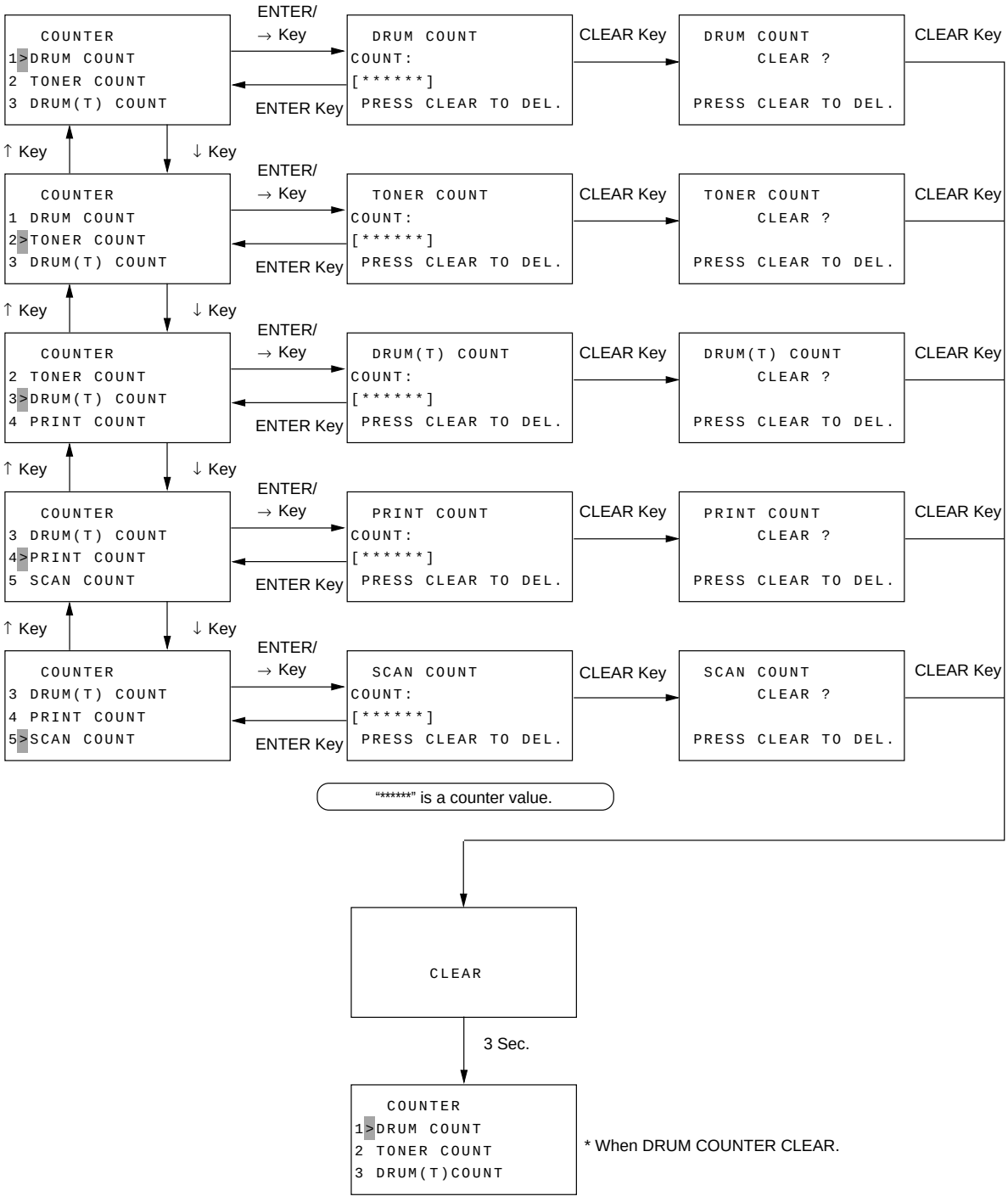
The following shows the case when the service bit has been set OFF & TONER COUNT CLEAR = ON.



6.4 Printer Counter Display/Clear

1. Purpose
   The service personnel can clear and check the following data:
   - Image Drum
   - Toner
   - Image Drum (Total)
   - Print
   - Scan

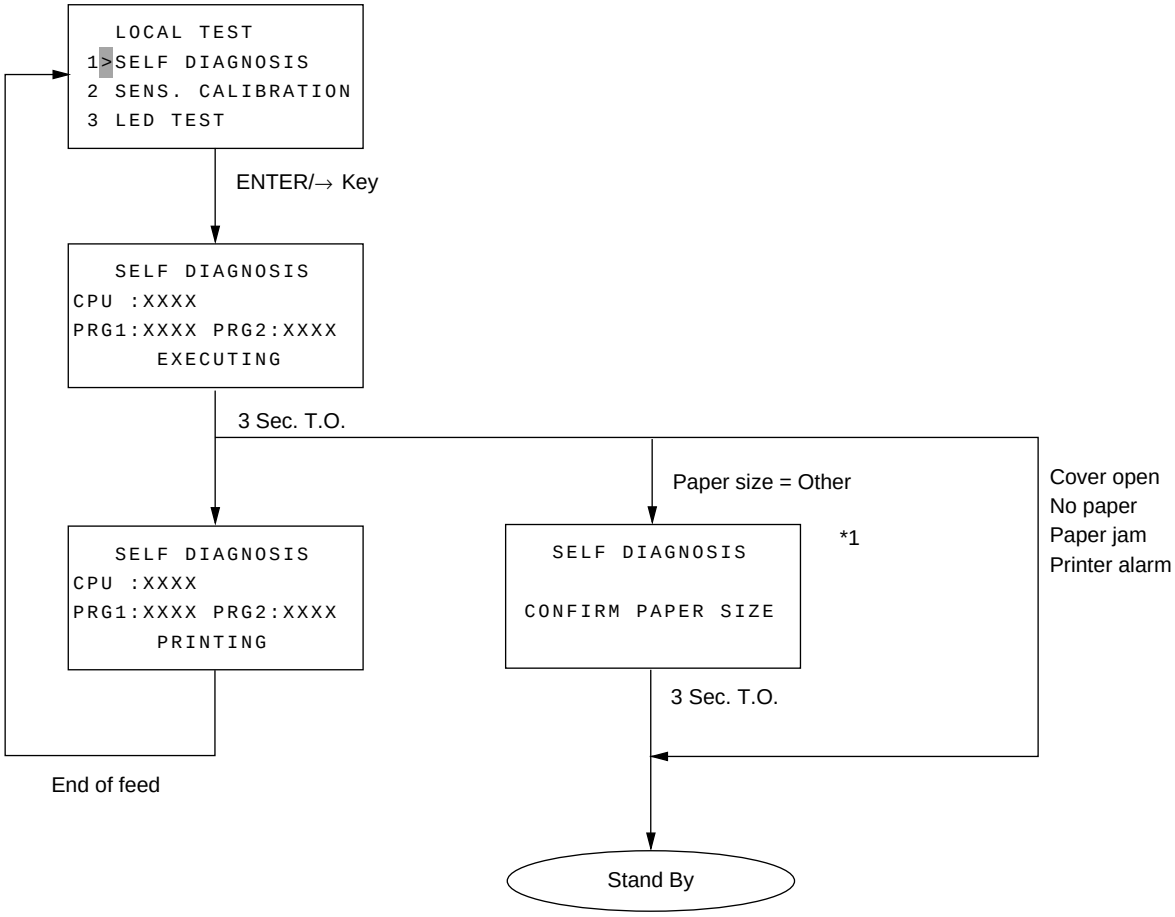
2. Procedure
   The following shows the case when the service bit has been set ON.



6.5 Self-diagnosis Test

1. Purpose
   To check ROMs, RAMs and printing function.
   Test report will be automatically printed out.

2. Procedure



*1: OTHER is shown as below:
EXEC./JIS-B5/A5/A6

SELF DIAGNOSIS REPORT

12/24/1998 12:00
ID=0dc Takasaki

MAIN BOARD					
	CPU-ROM	VERSION	aaaa		*1
		HASH	OK	hhhh	*1
	CPU-RAM		OK		
	PROGRAM1	VERSION	aaaa		
		HASH	OK	hhhh	
	PROGRAM2	VERSION	aaaa		
		HASH	OK	hhhh	
	LANGUAGE	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	TYPE	01		
	MODEM	VERSION	hhhh		*1
	RAM1	8M	OK		
	RAM2		OK		
	CARTRIDGE(TONER/ID)		bbbb/bbbb		*1/*4
	OPT-MEM	2M	OK		*2
DEVICE ID	FX-176VP				*2/*3
HSP			OK		*2/*5
ISDN BOARD			OK		*2/*6
	CPU-ROM	VERSION	aaaa		
		HASH	OK	hhhh	
	CPU-RAM		OK		
	PROGRAM	VERSION	aaaa		
		HASH	OK	hhhh	
	RAM	2M	OK		
	DPRAM	2K	OK		

G3 Option Board

SELF DIAGNOSIS REPORT

12/24/2000 12:00
ID=0dc Takasaki

MAIN BOARD					
	CPU-ROM	VERSION	aaaa		
		HASH	OK	hhhh	
	CPU-RAM		OK		
	PROGRAM1	VERSION	aaaa		
		HASH	OK	hhhh	
	PROGRAM2	VERSION	aaaa		
		HASH	OK	hhhh	
	LANGUAGE	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	TYPE	01		
	MODEM	VERSION	hhhh		
	RAM1	8M	OK		
	RAM2		OK		
	CARTRIDGE(TONER/ID)		bbbb/bbbb		*1/*4
	OPT-MEM	2M	OK		*2
DEVICE ID	FX-176VP				
G3 OPTION BOARD				OK	*7
	CPU-ROM	VERSION	aaaa		
		HASH	OK	hhhh	
	CPU-RAM		OK		
	PROGRAM	VERSION	aaaa		
		HASH	OK	hhhh	
	RAM	2M	OK		
	DPRAM	2K	OK		
	MODEM	VERSION	hhhh		

(When all description conditions are met.)

IPFAX Board

SELF DIAGNOSIS REPORT

12/24/1998 12:00
ID=0dc Takasaki

MAIN BOARD					
	CPU-ROM	VERSION	aaaa		*1
		HASH	OK	hhhh	*1
	CPU-RAM		OK		
	PROGRAM1	VERSION	aaaa		
		HASH	OK	hhhh	
	PROGRAM2	VERSION	aaaa		
		HASH	OK	hhhh	
	LANGUAGE	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	VERSION	aaaa		
		HASH	OK	hhhh	
	DEFAULT	TYPE	01		
	MODEM	VERSION	hhhh		*1
	RAM1	8M	OK		
	RAM2		OK		
	CARTRIDGE(TONER/ID)		bbbb/bbbb		*1/*4
	OPT-MEM	2M	OK		*2
DEVICE ID	FX-176VP				*2/*3
IPFAX BOARD			OK	nn	*8
	IPL	VERSION	01.01		
	PROGRAM	VERSION	01.11		
ISDN BOARD			OK		*2/*6
	CPU-ROM	VERSION	aaaa		
		HASH	OK	hhhh	
	CPU-RAM		OK		
	PROGRAM	VERSION	aaaa		
		HASH	OK	hhhh	
	RAM	2M	OK		
	DPRAM	2K	OK		

Note:

*1: a indicates an alphanumeric character; n indicates a numeric character (0 to 9); h indicates a hexadecimal number; and b indicates 0 or 1.

*2: Printed when the option board is mounted and if not, entry lines following this line are not omitted.

*3: Lowercase letters can also be listed. This item reports MDL information for the PnP device ID only.
This item can be up to 40 characters long.

*4: This item reports toner/ID cartridge lockout identification information (port read value).
Entry items shown below are printed.
CARTRIDGE (TONER/ID) bbbb/bbbb

*5: For the LAN board, the status of the LAN board at self diagnosis shall be recorded. (If the LAN board is in the alarm state, the cause of the alarm is recorded.) When an HSP error occurs, entry items shown below are printed.
HSP NG nn

nn=10:
Command was sent to the HSP card but its response was not returned within 5 seconds.

nn=20:
The Status Window did not show in the initial state 10 seconds after powering on.

nn=21:
Received the operation command during the POWER ON mode if it takes 3 seconds or more to transfer to the operation mode after clearance of the initial synchronizing flag.

nn=22:
In the Reverse Data command, the HSK card could not transmit all the notification data from the higher modules. (In case a communication error has occurred between the HSP and host.)

nn=00:
Others

*6: The result of ISDN board test, which is performed at self diagnosis, shall be lprinted. (Error information at power-on shall also be listed partially.)
When an ISDN error occurs,entry items shown below are printed.
ISDN BOARD NG nn

nn=01 Waiting for PC loading
The BOOT2 signal from the host side at the time of power on is set to PC loading mode.

nn=02 Board abnormality
The ISDN board program hash is NG upon power on.

nn=03 Board abnormality
The initial sequence between boards cannot be excuted in 10 seconds after power on. (The status window does not indicate a normal value.)

nn=04 Board abnormality
The initial sequence of the ISDN LSI cannot be excuted upon power on.
(No response for the command, NG response)

nn=05 ISDN LSI abnormality
The result of ISDN LSI testing function is NG: (ROM/RAM test, Loop test)

*7 Describe only when G3 option is installed.
If the cause of error (NG) is nn=01 to 03 (error information at POWER ON), description of detailed information of option board is disabled.

G3 OPTION BOARD NG nn

nn=01 Waiting for PC loading
At power ON, BOOT2 signal from the Host read that PC is in loading mode.
nn=02 Abnormal Board
At power ON, PROGRAM HASH of ISDN board was NG.
nn=03 Abnormal Board
After 10 sec from power ON, initial sequence failed to be executed between the boards. (Status window failed to show normal value.)

* Describe the TONER/ID lockout identification information 4 digits (0 or 1).

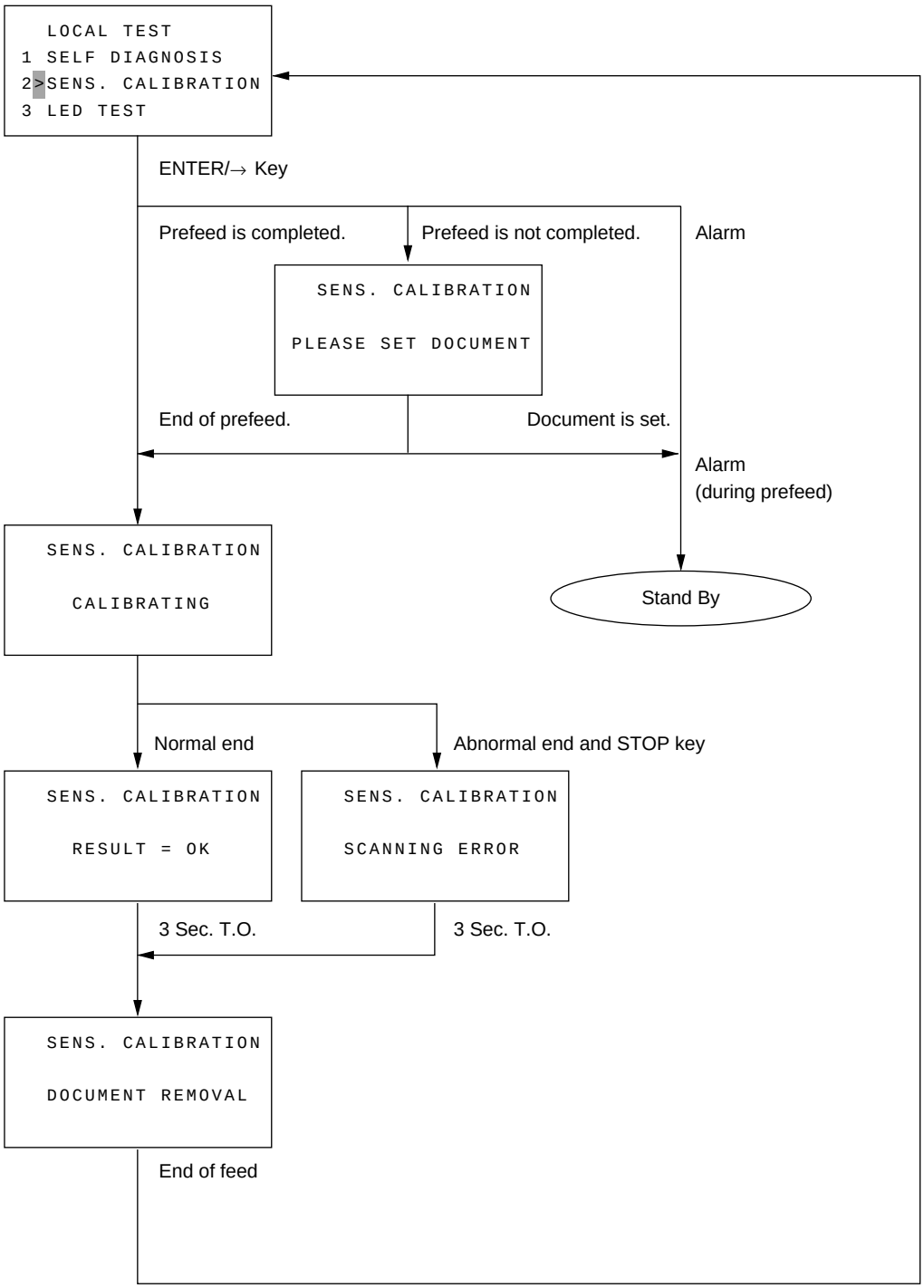
* When LM (firmware) version unmatched error with MCNT and G3/G4 option board occurs at the time G3 or G4 option board is installed, the board details information is described on the self diagnosis report.

*8: This display appears only when IPFAX (T.38) board is installed.
The detail of the state display code (nn) is as follows.
IPFAX BOARD OK / NG nn

OK 01 ; Initial process
OK 02 ; Start Up state (Drive is not available)
OK 03 ; Start Up state (Drive is not available)
OK 04 ; Start Up state (GK not registered)
OK 05 ; Start Up state (LAN not available)
NG 00 xx xx Å‘ 06 xx xx ; IPL Control Member Error
NG 07 xx xx Å‘ 0F xx xx ; Drive Control Member Error
NG 10 xx xx Å‘ 1B xx xx ; H323 Control Member Error

6.6 Sensor Calibration Test

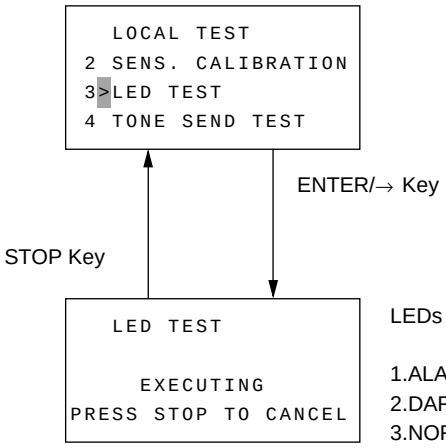
1. Purpose
   To adjust the linearity of output levels of contact image sensor.



6.7 LEDs Test

1. Purpose
   To check all LEDs on operation panel by lighting.

2. Procedure



LEDs go on/off in the following order:

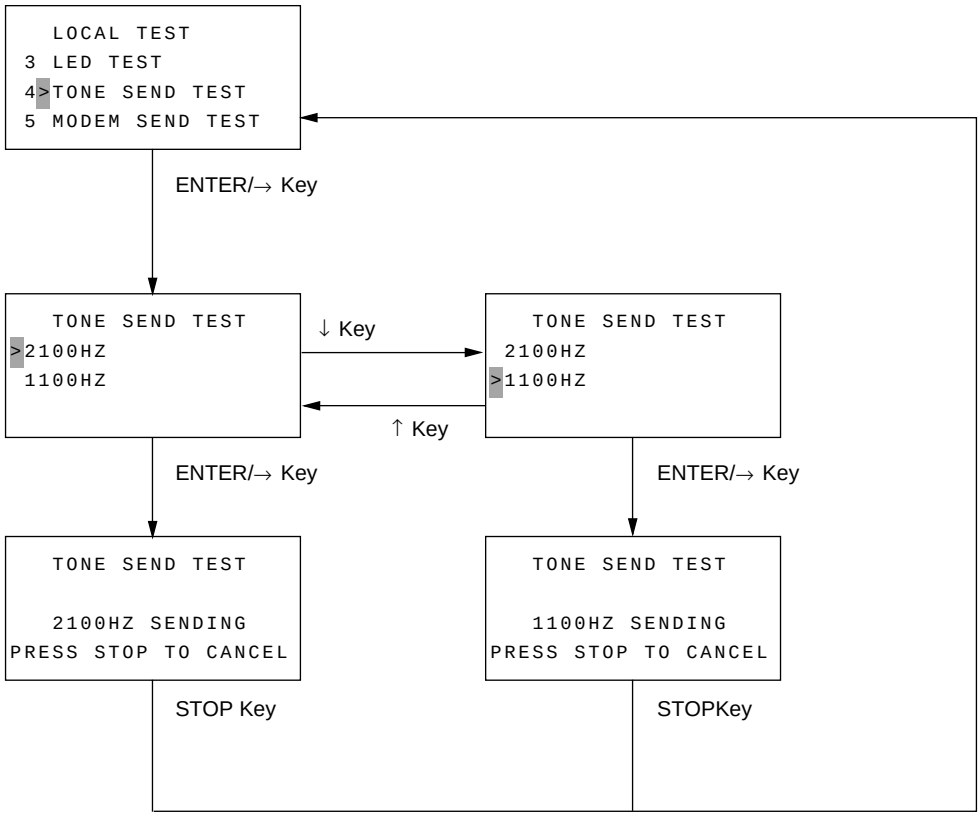
1.ALARM
2.DARK
3.NORMAL
4.LIGHT
5.STD
6.FINE
7.EX.FINE
8.PHOTO
9.All LED

LEDs 1-9 go on/off in the above order repeatedly until the STOP key is pressed.

6.8 Tone Send Test

1. Purpose
   To send the G3 tonal frequencies to the line.

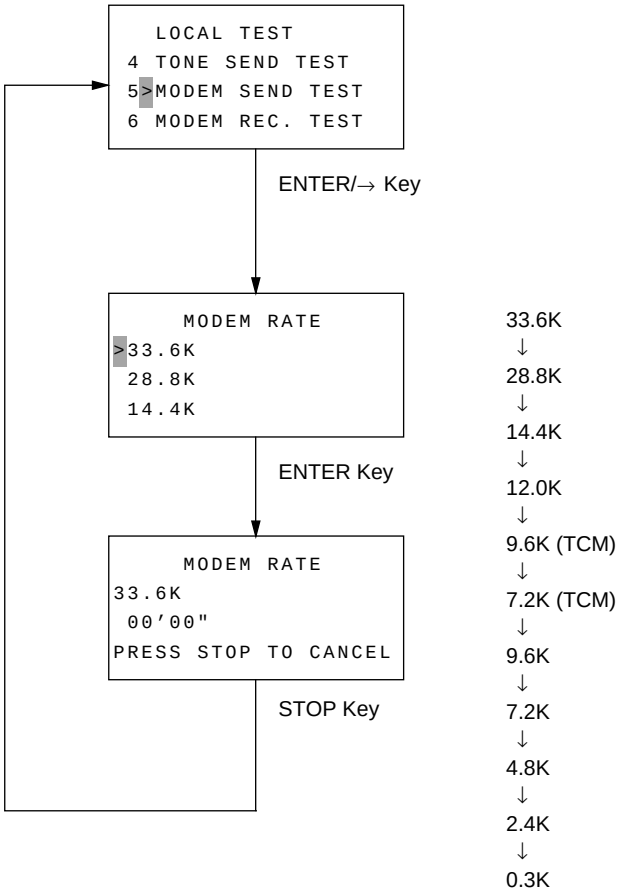
2. Procedure



Note1: This testing is continued until STOP key is pressed.
Note2: This mode cannot be selected when ISDN board is installed.

6.9 High-speed Modem Send Test

To check the telephone line quality in combination with a remote station programmed to the high-speed modem receive test mode.

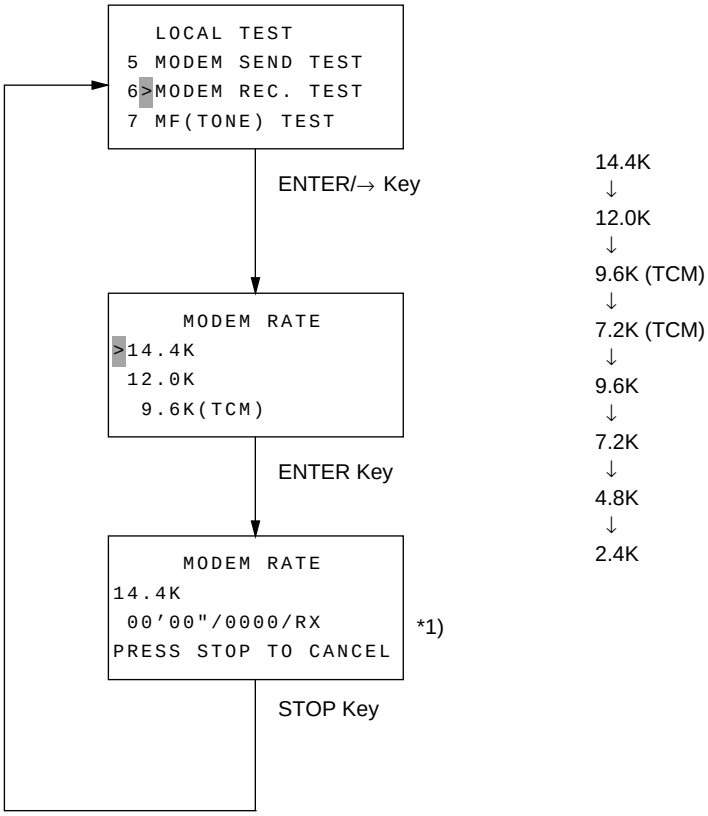


Note1: This testing is continued until STOP key is pressed.
Note2: This mode cannot be selected when ISDN board is installed.

6.10 High-speed Modem Receive Test

1. Purpose
   To check the telephone line quality in combination with a remote station programmed to the high-speed modem send test mode.

2. Procedure



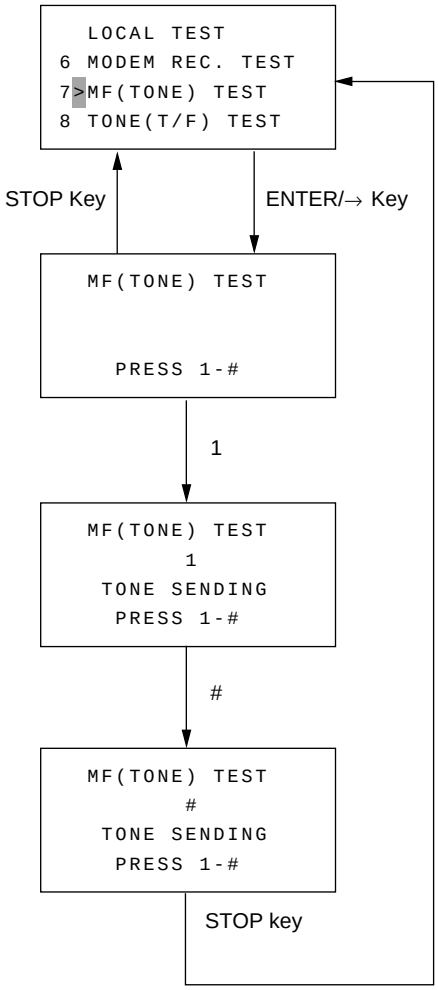
*1 /RX is displayed on the LCD
when receiving carrier is set to ON.

Note1: This testing is continued until STOP key is pressed.
Note2: This mode cannot be selected when ISDN board is installed.

6.11 MF Tone Send Test

1. Purpose
   To send the multi-frequencies of tone dialling to the line.

2. Procedure



- After the test, press STOP key.
  Frequencies of MF tones are as follows:

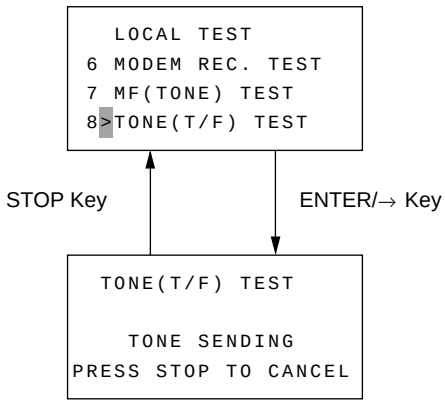
1	697 Hz/1209 Hz
2	697 Hz/1366 Hz
3	697 Hz/1477 Hz
4	770 Hz/1209 Hz
5	770 Hz/1366 Hz
6	770 Hz/1477 Hz
7	852 Hz/1209 Hz
8	852 Hz/1366 Hz
9	852 Hz/1477 Hz
0	941 Hz/1366 Hz
*	941 Hz/1209 Hz
#	941 Hz/1477 Hz

*Note1: When 0-9, *, or # key is pressed during tone sending, the corresponding MF (Tone) is sent.*
Note2: MF (Tone) test is continued until STOP key is pressed.
Note3: This setting cannot be selected when ISDN board is installed.

6.12 Tone (TEL/FAX)

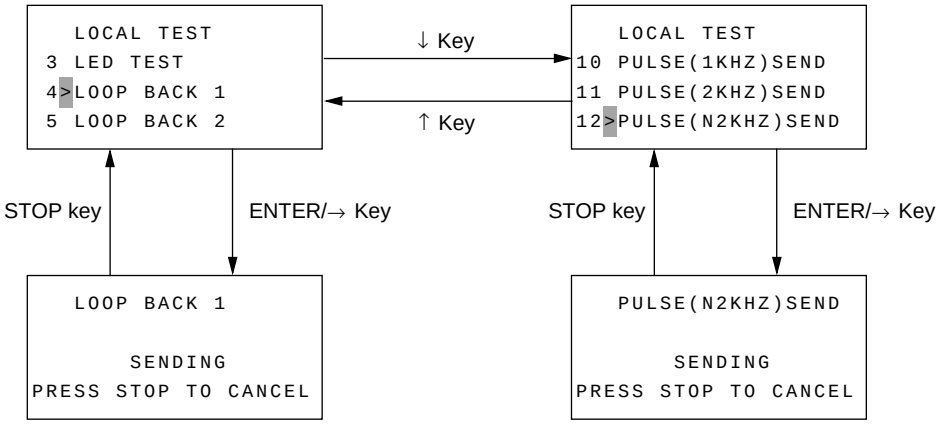
1. Purpose
   To check the pseudo-ring back tone of TEL/FAX automatic switching.

2. Procedure



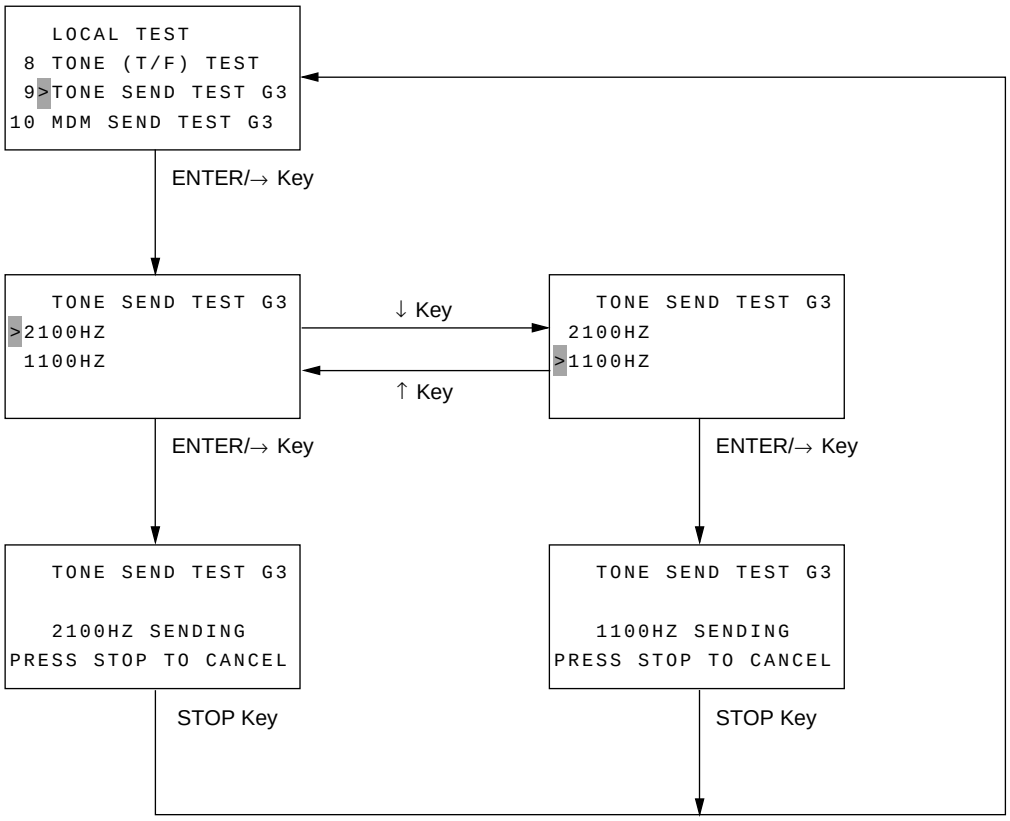
Note1: This testing is continued until STOP key is pressed.
Note2: This mode cannot be selected when ISDN board is installed.

6.13 ISDN Sending Test



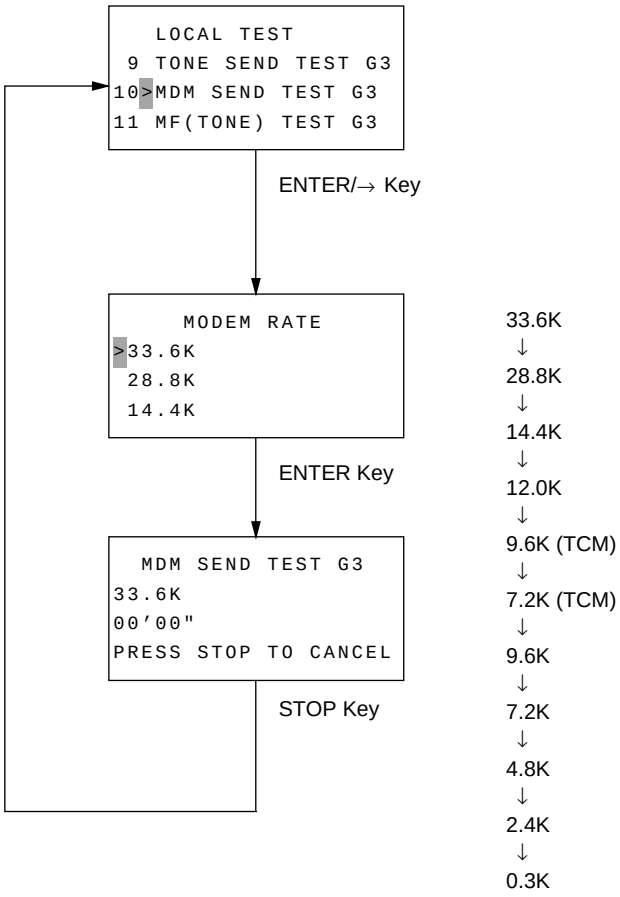
*:When ISDN board is installed, the following items can be selected:
LOOP BACK1 to PULSE(N2KHZ) send
*:When each type of testing is executed, LCD display deffers only title of highest (first) layer.
*:These tests are continued till STOP key is pressed.

6.14 Tone Send Test G3



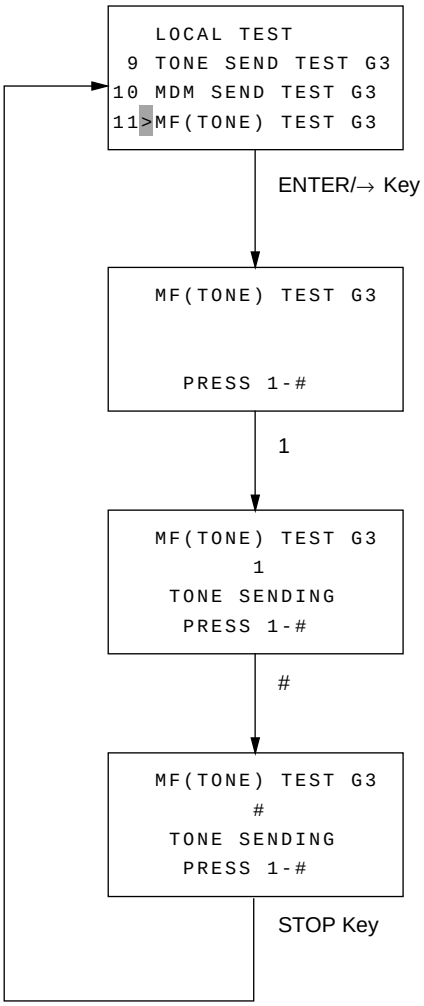
* This testing is continued till STOP key is pressed.
* This mode can be selected when G3 option is installed.

6.15 Modem Send Test G3



* This testing is continued until STOP key is pressed.
* This mode can be selected when G3 option is installed.

6.16 MF (Tone) Test G3



* When 0-9, *, or # key is pressed during tone sending, the corresponding MF tone is sent.
* This testing is continued will STOP key is pressed.
* This mode can be selected when G3 option is installed.

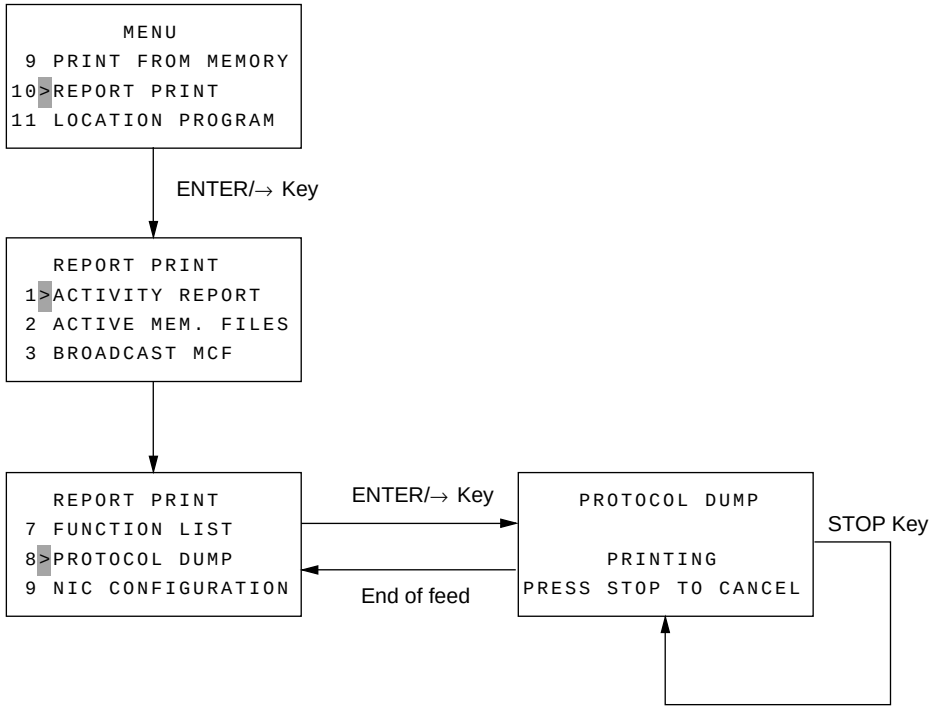
6.17 Protocol Dump Data Printing

1. Purpose
   To analyze the transmitted/received G3 protocol signals.

2. Procedure

   • Manual print-out of the last communication.

   (a) Manual print-out

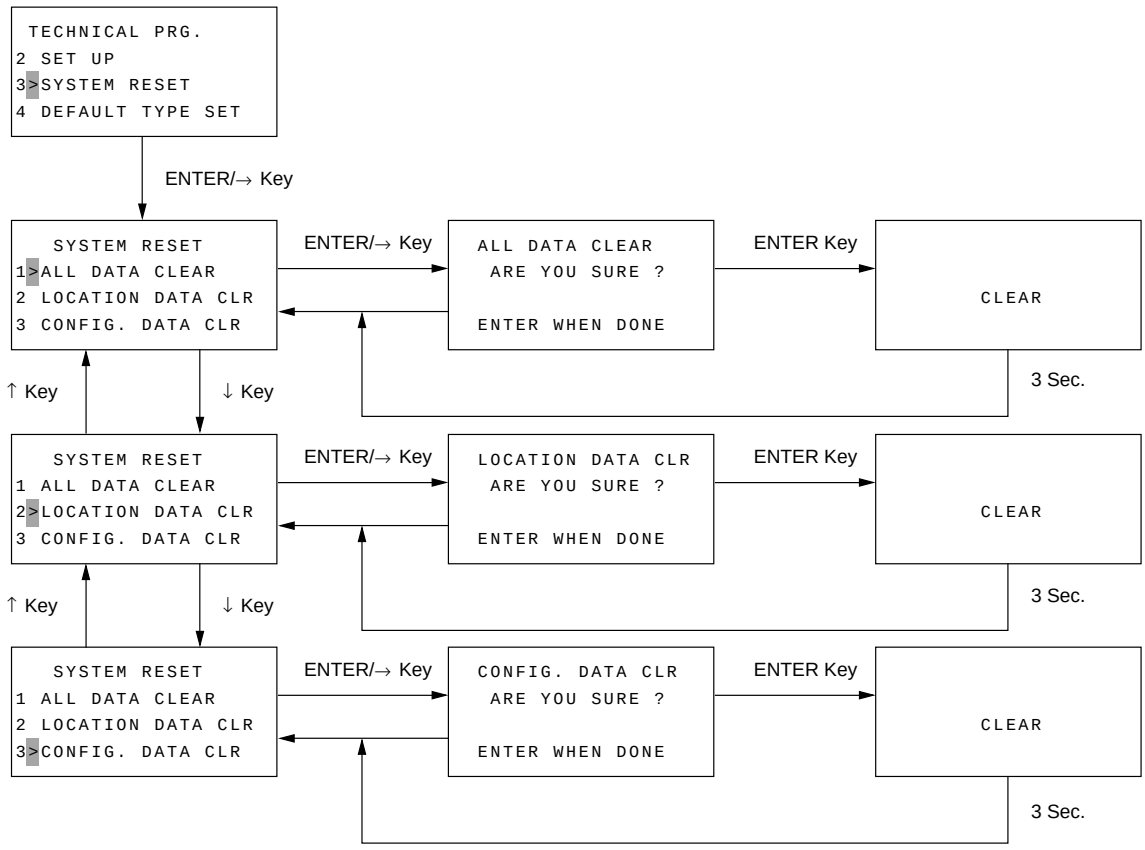


6.18 System Reset

1. Purpose

   To clear or initialize the following data:
   (a) Location data
   (b) Configuration data (default)

2. Procedure



Note: After ALL DATA CLEAR or CONFIG. DATA CLR is executed, the setting data must be transferred from the main board to the G3 option board.

6.19 Service Codes

1) The service code can be printed on Activity Report to recognize the result of each communication.

2) The activity report indicates the code ”0000", should a communication terminates on normal status as a service code.

3) The activity report indicates one of the codes of “90XX”, should a communication terminates on abnormal status, as an error code.

4) Besides the above codes of “90XX”, the following codes are prepared for identifying an abnormal status in details.

-21XX: For error codes in Group 3 transmission phase B
-29XX: For error codes in Group 3 reception phase B
-39XX: For error codes in Group 3 reception phase C
-41XX: For error codes in Group 3 transmission phase D
-49XX: For error codes in Group 3 reception phase D
-90XX: Common error codes
-AEXX: ISDN Common error codes
-BBXX: ISDN Dch layer 2
-BAXX: ISDN Dch layer 3
-BCXX: ISDN Bch layer 2
-B2XX: ISDN Bch layer 3
-B7XX: ISDN Bch layer 4
-B9XX: ISDN Bch layer 5
-B8XX: ISDN Bch layer 6
-Exxx: SMTP error code
-Fxxx: POP3 error code

6.19.1 G3 Service Code List

Table 6.19.1 Service Codes List (1/3)

Code	Description
0000	Successful end of communication.
1080	STOP key has been pressed while calling a remote fax.
10A2	Busy tone detected.
14C0	Dial tone not detected.
14C1	Line current not detected.
14C2	Calling-and-waiting for line connection time out.
14C3	Dialling limit time out.
14D0	DTMF tone “D” is received from the Fax2Net Server.
14D1	Wait time out upon DTMF tone “A” is not received from the Fax2Net Server.
14D2	Wait time out upon DTMF tone “B” or “D” is not received from the Fax2Net Server.
21A0	Received signal other than DIS/DTC.
21A1	Contents of received DIS/DTC are faulty.
21A3	Each time there is no response from the receiver for sending TCF three times.
21A4	TCF fall back is not possible.
21A5	Received signal other than the desired signal in response to sending TCF.
21B0	Transmitter tried to transmit by confidential transmission function but the remote fax has not the capability of confidential reception.
21B1	Transmitter tried to transmit by Broadcast Initiate function but the remote fax has not the broadcast capability.
21C0	In Closed Network setting, TSI/CIG/CSI is either not received or, if received, it is not authorized one.
21E0	Contents of CM/JM are faulty at transmission side.
21E1	Phase 2 time out at transmission side.
21E2	Phase 3 time out at transmission side.
21E3	Training time out of phase B control channel at transmission side.
29B6	In Confidential Reception, the mail box specified by transmitter is not set up and open.
29B7	In Relay Broadcast Reception, the specified group number is erroneous.

Table 6.19.1 Service Codes List (2/3)

Code	Description
29C1	In closed Network setting, TSI/CSI is either not received or, if received, it is not authorized one.
29E0	Contents of CM/JM are faulty at receive side.
29E1	Phase 2 time out at receive side.
29E2	Phase 3 time out at receive side.
29E3	Training time out of phase B control channel at receive side.
29F1	In Relay Broadcast Reception, the relay password is unmatched.
39A0	The number of continuous-error lines have exceeded the specified limit.
39A1	The number of random-error lines have exceeded the specified limit.
39B0	Memory Overflow has occurred while receiving in memory.
39B1	Memory Overflow occurred during Confidential Reception.
39B2	Memory overflow occured during Relay Broadcast Reception.
39C0	DECODER hardware error. (cannot reproduce picture)
39C1	DECODER hardware error. (cannot detect end of picture)
41A0	There was no response each time in response to the three post commands.
41A6	Received signal other than the desired signal in responce to the post command.
41A9	Fall back in Phase C is not possible.
41C8	T5 time out.
41CE	Received negative signal in response to the post command.
41E0	Control chanel data. Time out in Phase D.
49CC	Received signal other than the desired signal in response to RNR.
49CD	Command not received in response to RNR.
49CF	In Relay Broadcast Reception, reception is interrupted due to defective image quality.
49E0	Data time out of
49E1	Fall back in Phase C is not possible.
60A0	Broadcast completed.
6803	DCN received in response to NSF/DIS without sending a single picture.
9080	Pressed STOP key.
9081	T1 time out.
9082	T2 time out.

Table 6.19.1 Service Codes List (3/3)

Code	Description
9083	T3 time out.
9084	No recording paper.
9087	Document jam.
9088	60-minute or 70-minute time out.
9089	Document length has exceeded its maximum limit.
908E	Recording paper jam.
9090	Received DCN.
909D	Telephone number to be called to the Fax2Net is the wrong number.
90B1	Picture memory hash error.
90C1	Document removed prior to transmission.
90C6	Normal or error-free lines not received for 13 seconds.
90C7	Error frame protocol received.
90D4	Hardware error in transmission system. (response of modem not detected)
90D5	ENCODER error. (Picture storage fault)
90F0	Option (2'nd tray) error.
90F1	Fan motor error.
90F2	Fuser error.
90F3	Recording paper size error.
90F4	Cover open.

6.19.2 G4 Service Code Lists

Table 6.19.2 G4 Service Code Lists (1/3)

Classification	Code	Description
Dch layer 2	BB02	LSI NG
	BB05	TEI release by network
	BB06	TEI verification procedure failure
Dch layer 3	BA01	Unallocated (unassigned) number
	BA02	No route to specified transit network
	BA03	No route to destination
	BA06	Channel unacceptable
	BA07	Call awarded and being delivered in an established channel
	BA11	User busy
	BA12	No user responding
	BA13	No answer from user (user alerted)
	BA15	Call rejected
	BA16	Number changed
	BA1A	Non-selected user clearing
	BA1B	Destination out of order
	BA1C	Invalid number format
	BA1D	Facility rejected
	BA1E	Response to STATUS-ENQUIRY
	BA1F	Normal, unspecified
	BA22	No circuit/channel available
	BA26	Network out of order
	BA29	Temporary failure
	BA2A	Switching equipment congestion
	BA2B	Access information discarded
	BA2C	Requested circuit/channel not available
	BA2F	Resources unavailable, unspecified
	BA31	Quality of service unavailable
	BA32	Requested facility not subscribed
	BA39	Bearer capability not authorized
	BA3A	Bearer capability not presently available
	BA3F	Service or option not available, unspecified
	BA41	Bearer capability not implemented
	BA42	Channel type not implemented
	BA45	Requested facility not implemented
	BA46	Only restricted digital information bearer capability is available
	BA4F	Service or option not implemented, unspecified
	BA51	Invalid call reference value
	BA52	Identified channel does not exist
	BA53	A suspended call exists, but this call identity does not
	BA54	Call identity in use
	BA55	No call suspended
	BA56	Call having the requested call identity has been cleared
	BA58	Incompatible destination
	BA5B	Invalid transit network selection
	BA5F	Invalid message, unspecified
	BA60	Mandatory information element is missing
	BA61	Message type non-existent or not implemented
	BA62	Message not compatible with call state or message type non-existent or not implemented
	BA63	Information element non-existent or not implemented
	BA64	Invalid information element contents
	BA65	Message not compatible with call state
	BA66	Recovery on timer expiry
	BA6F	Protocol error, unspecified
	BA7F	Interworking, unspecified
	BB01	CONN message wait time out
	BB07	Reset request by network

Table 6.19.2 G4 Service COde Lists (2/3)

Classification	Code	Description
Bch layer 2	BC02	N2 times time out
	BC03	FRMR reception
	BC04	FRMR transmission
	BC05	The other party link disconnection
	BC08	T3 time out
	BD01	SABME wait time out
Bch layer 3	B201	The other party terminal busy
	B203	Incorrect facility request
	B205	Network congestion
	B209	Connection impossible (failure or absent)
	B210	Packet that is not adaptable to status transition (Packet level ready state)
	B211	Remote procedure error
	B212	Packet that is not adaptable to status transition (DTE restart request state)
	B213	Local procedure error
	B214	Packet that is not adaptable to status transition (Empty state)
	B215	Packet that is not adaptable to status transition (CO packet wait)
	B216	Packet that is not adaptable to status transition (CA packet wait)
	B217	Packet that is not adaptable to status transition (During data transmission)
	B218	Packet that is not adaptable to status transition (Outgoing/incoming collision)
	B219	Packet that is not adaptable to status transition (CQ packet)
	B221	Unallowable packet (Packet type not clear)
	B222	Unallowable packet (Call by special incoming logic channel)
	B226	Unallowable packet (Too short packet)
	B227	Unallowable packet (Too long packet)
	B229	Unallowable packet (Restart packet in which LCN or LCGN is not 0)
	B22A	Unallowable packet (Packet that is not adaptable to the facility)
	B231	Timer time out (CA packet wait time out)
	B232	Timer time out (CF packet wait time out)
	B233	Timer lapsed (RR/RNR packet wait time out)
	B241	Call setting problem (unallowable facility code)
	B242	Call setting problem (unallowable facility parameter)
	B243	Call setting problem (incoming address is invalid)
	B244	Call setting problem (outgoing address is invalid)
	B245	Call setting problem (invalid facility length)
	B246	Call setting problem (call termination reject)
	B247	Call setting problem (No empty logic channel)
	B248	Call setting problem (outgoing/incoming collision)
	B249	Call setting problem (overlapped facility request)
	B24A	Call setting problem (address length other than zero)
	B24B	Call setting problem (facility length other than zero)
Bch layer 4	B702	Reception TDT length over
	B703	TDT length negotiation unsuccessful
	B704	Invalid block received
	B705	Abnormal parameter received
	B706	Illegal block received
	B707	TCR wait time out (T0.2 T.O)
	B708	TCA wait time out (T1.1 T.O)
	B709	Communication interruption due to TCC reception
	B70A	Communication interruption due to TBR reception

Table 6.19.2 G4 Service COde Lists (3/3)

Classification	Code	Description
Bch layer 5	B901	Command response reception error
	B902	Non-implicit command response received
	B903	Lack of essential parameter
	B904	Invalid parameter reception
	B905	Invalid parameter value reception
	B906	Window size over reception
	B907	Document reference number error
	B908	Length illegal
	B909	Check point error
	B90A	Unallowable document
Bch layer 6	B801	Command response reception error
	B802	Parameter reception error
	B803	Negotiation unsuccessful RSSP reception
	B804	Negotiation unsuccessful RSSN reception
	B805	CSCC at the time when the transmission right cannot be reversed
	B806	CSA reception
	B809	Error recovery time out
	B80A	Time out at the time of termination
	B80B	Close wait time out
	B80C	CSE reception before close
Bch layer 7	AE01	Negotiation unsuccessful (requirement for communication with the other party FAX is not met)
	AE02	Negotiation unsuccessful (only the other party standard)
	AE03	The other party SUD fault
	AE04	Basic terminal function unmatched
	AE05	Switching type unmatched
	AE06	The other party TU fault

6.19.3 Internet-Fax Service Code List

See the Section "7.7.1 Service code" in "Internet Fax & Network Print/Network Scanner Kit Quick Installation Guide".

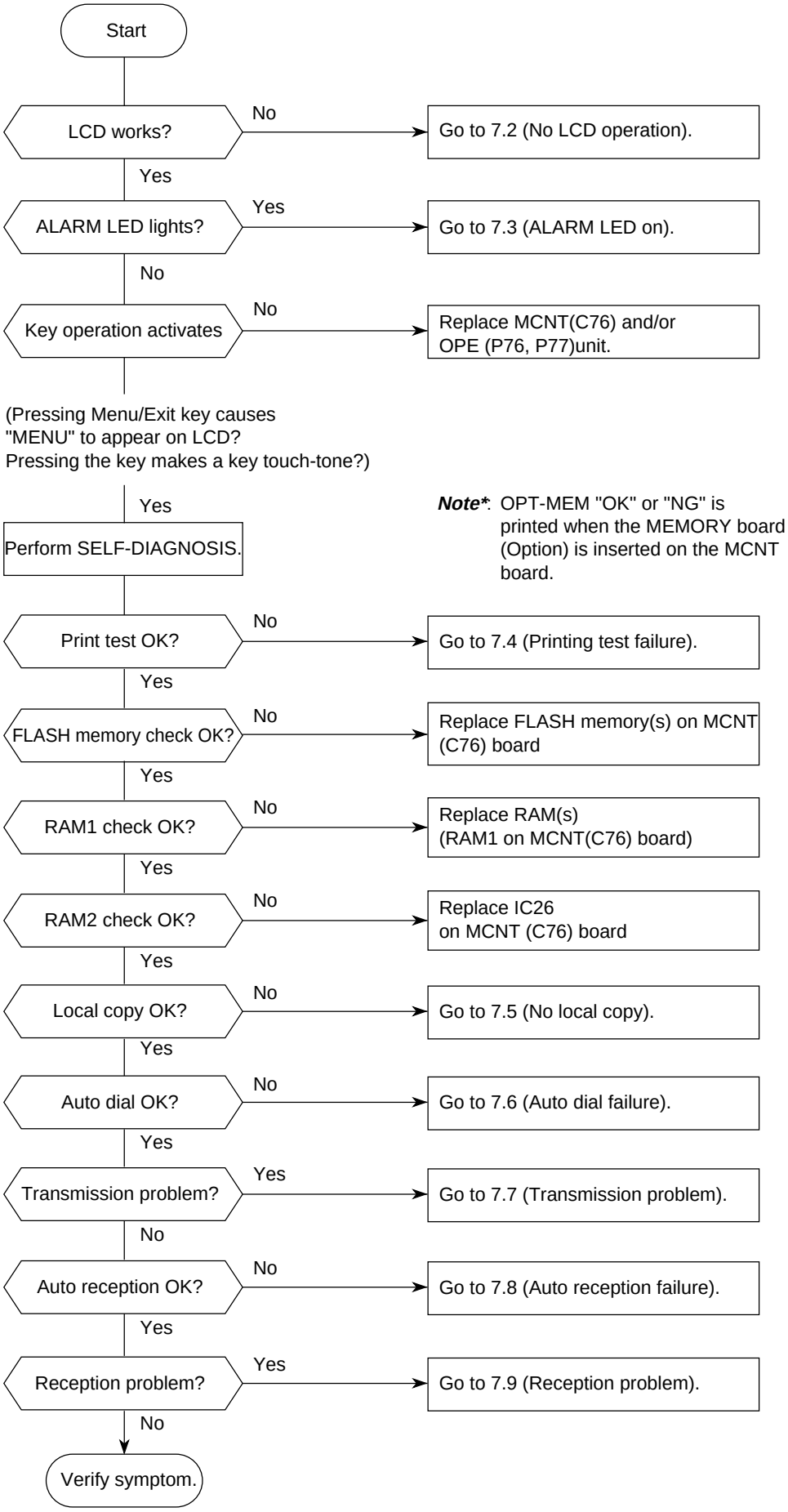
OKIFAX 1050/2350/2450/5200/5300/5500/5600/4100/4500/5700/5900/5750/5950/5780/5980/OKIOFFICE44/84 Extension cable lists

No.	Oki Parts Number	Description	Remarks	OKIFAX 1050	OKIFAX 2350	OKIFAX 2450	OKIFAX 5200/5300	OKIFAX 5500/5600	OKIOFFICE44 OKIFAX 4100	OKIOFFICE84 OKIFAX 4500	OKIFAX 5700/5900/ 5750/5950 5780/5980
1	4YS4111-5655P001	Extension cable (OPE)		O	O	O	•••	•••	•••	•••	•••
2	4YS4111-5656P001	Extension cable (Sensor)		O	O	O	O	O	O	O	O
3	4YS4111-5657P001	Extension cable (PC1, 2)		O	O	O	O	O	O	O	O
4	4YS4111-5658P001	Extension cable (Speaker)		O	O	O	O	O	O	O	O
5	4YS4111-5659P001	Extension cable (PWU)		O	O	O	O	O	•••	•••	O
6	4YS4111-5660P001	Extension cable (FAN)		O	O	O	O	O	•••	•••	O
7	4YS4111-5661P001	Extension cable (S-motor)		O	•••	•••	•••	•••	O	•••	•••
8	4YS4111-5662P001	Extension cable (D-motor)		O	•••	•••	•••	•••	•••	•••	•••
9	4YS4111-5663P001	Extension cable (R-motor)		O	•••	•••	•••	•••	•••	•••	•••
10	4YS4111-5664P001	Extension cable (S-motor)		•••	O	O	O	O	O	O x 2	•••
11	4YS4111-5665P001	Extension cable (D-motor)		•••	O	O	O	O	•••	•••	•••
12	4YS4111-5666P001	Extension cable (R-motor)		•••	O	O	O	O	•••	•••	•••
13	4YS4111-5667P001	Extension cable (2nd)		•••	O	O	O	O	•••	•••	O
14	238A1071P0006	SUMI card (LED head)		O	O	O	O	O	O	O	•••
15	40331401YS	Connection code; extension (OPE)	OPE/MCNT	•••	•••	•••	O	O	O	O	O
16	40331501YS	Connection code; extension (MPSU)	MCNT/MPSU (Power)	•••	•••	•••	•••	•••	O	O	•••
17	40331602YS	Connection code; extension (Heater)	HEATER AC/PSU	•••	•••	•••	•••	•••	O	O	•••
18	40331801YS	Connection code; extension (Clutch)	CLUTCH/MCNT	•••	•••	•••	•••	•••	O	O	•••
19	40332001YS	Connection code; extension	FUJI CARD: MCNT/HVPS	•••	•••	•••	•••	•••	O	O	•••
20	40332201YS	Connection code; extension (SPSU)	SPSU (Sub-power)/MCNT	•••	•••	•••	O	O	•••	•••	•••
21	40332301YS	Connection code; extension (PSU)	PSU (Power)/SPSU (Sub-power)	•••	•••	•••	O	O	•••	•••	•••
22	40331901YS	Connection code; extension (Transformer)	Transformer/SPSU (Sub-power)	•••	•••	•••	O	O	•••	•••	•••
23	40780201YS	Connection Flat (P6L)	MCNT/P6L	•••	•••	•••	•••	•••	•••	O	•••
24	4YS4111-5665P001	Extension cable (D-motor)	Applicable to S-motor	•••	•••	•••	•••	•••	•••	•••	O
25		Extension cable (D/R-motor)	Applicable to D/R-motor	•••	•••	•••	•••	•••	•••	•••	O
26	238A1071P0006	SUMI card (LED1)		•••	•••	•••	•••	•••	•••	•••	O
27	238A1071P0007	SUMI card (LED2)		•••	•••	•••	•••	•••	•••	•••	O
28		Extension cable (3.3V)	PSU (3.3V)	•••	•••	•••	•••	•••	•••	•••	O

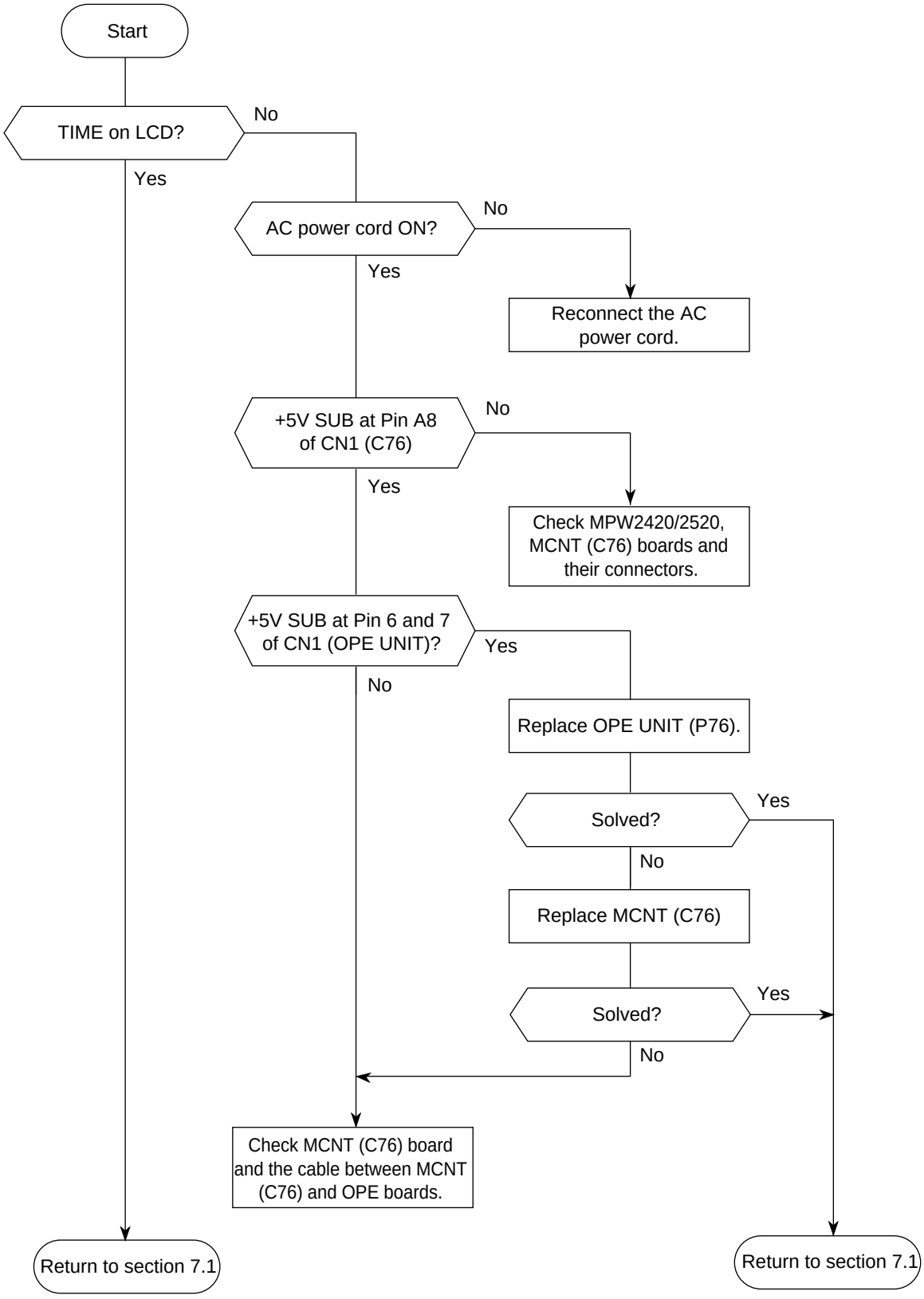
This chapter contains:
(a) Troubleshooting flow charts related to general operations
(b) Troubleshooting flow charts by test operations
(c) Troubleshooting flow charts placing an emphasis on mechanical portions

Section No.	Name of Flow Chart	(a)	(b)	(c)	Page
7.1	Overall troubleshooting flow chart	○	○		7-2
7.2	No LCD operation	○			7-3
7.3	ALARM LED on	○			7-4
7.4	Printing test failure	○	○		7-5
7.5	No local copy	○	○		7-6
7.6	Auto dial failure	○			7-7
7.7	Transmission problem	○			7-8
7.8	Auto reception failure	○			7-10
7.9	Reception problem	○			7-11
7.10	Sensor calibration test		○		7-13
7.11	LED test		○		7-14
7.12	Tone send test		○		7-15
7.13	High-speed modem test		○		7-16
7.14	MF (Tone) send test		○		7-18
7.15	Tone (TEL/FAX) send test		○		7-19
7.16	No acoustic line monitor	○			7-20
7.17	Power supply unit	○			7-21
7.18	No document feeding			○	7-22
7.19	Multiple document feeding			○	7-23
7.20	Document skew			○	7-24
7.21	Document jam			○	7-26
7.22	Printer unit				7-27
7.23	G3 Dual Line Troubleshooting Flow Chart	○			7-48
7.24	Auto Dial Failure (G3 Dual Line)	○			7-49
7.25	Transmission Problem (G3 Dual Line)	○			7-50
7.26	Auto Reception Failure (G3 Dual Line)	○			7-52
7.27	Reception Problem (G3 Dual Line)	○			7-53
7.28	High-speed Modem Test (G3 Dual Line)	○			7-55
7.29	MF Send Test (G3 Dual Line)	○			7-57
7.30	No Acoustic Line Monitor (G3 Dual Line)	○			7-58

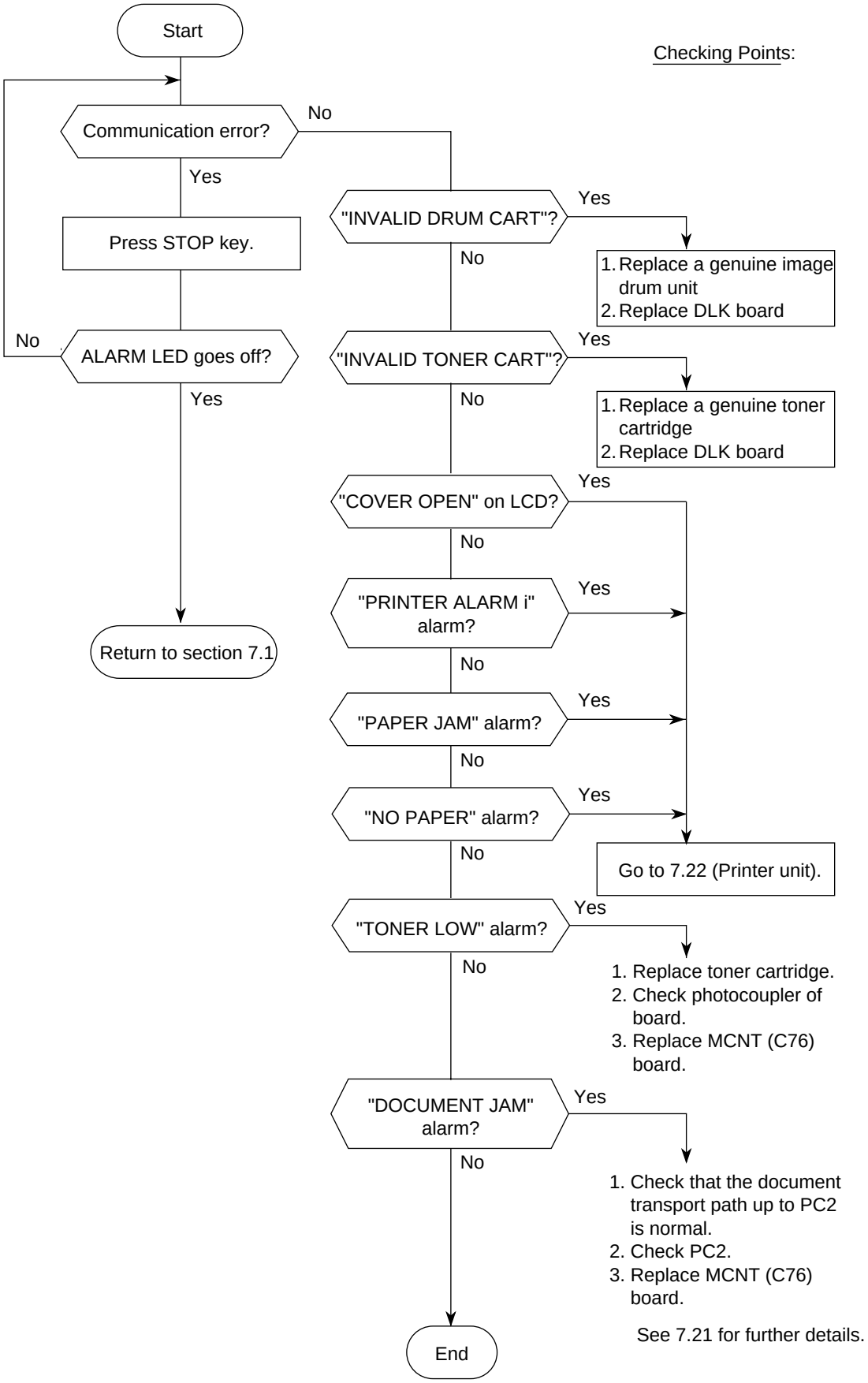
7.1 Overall Troubleshooting Flow Chart



7.2 No LCD Operation

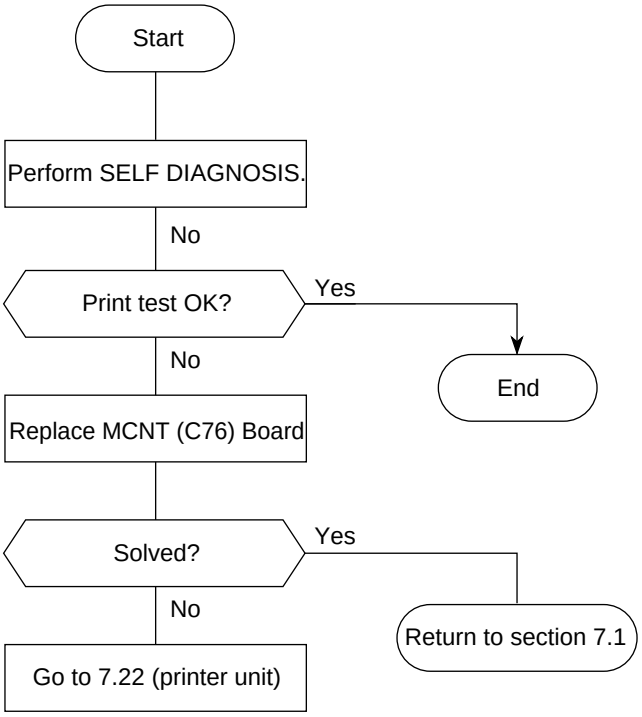


7.3 Alarm LED On

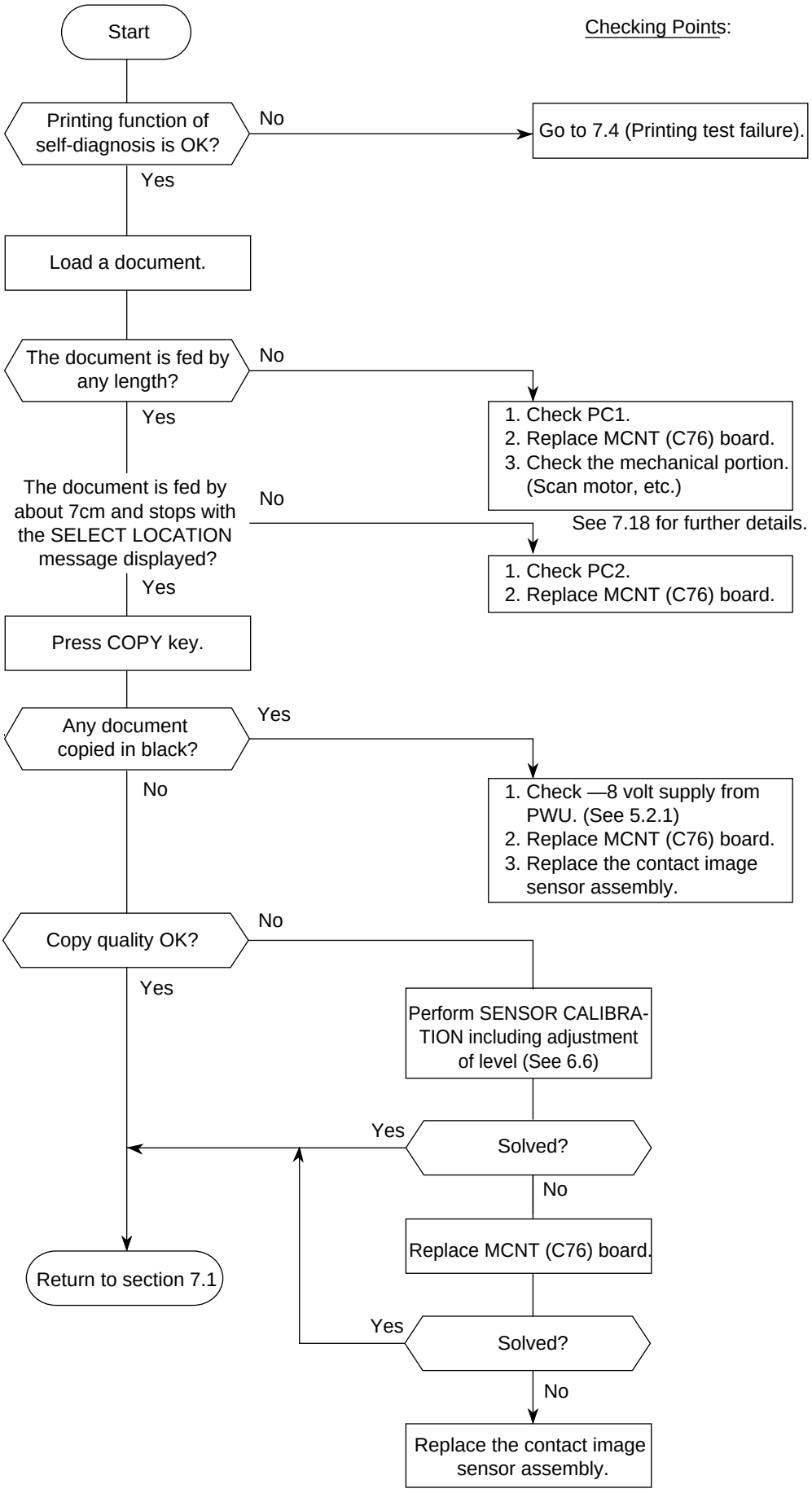


Note* :"PRINTER ALARM i" will be shown as follows: PRINTER ALARM 2 and PRINTER ALARM 4.

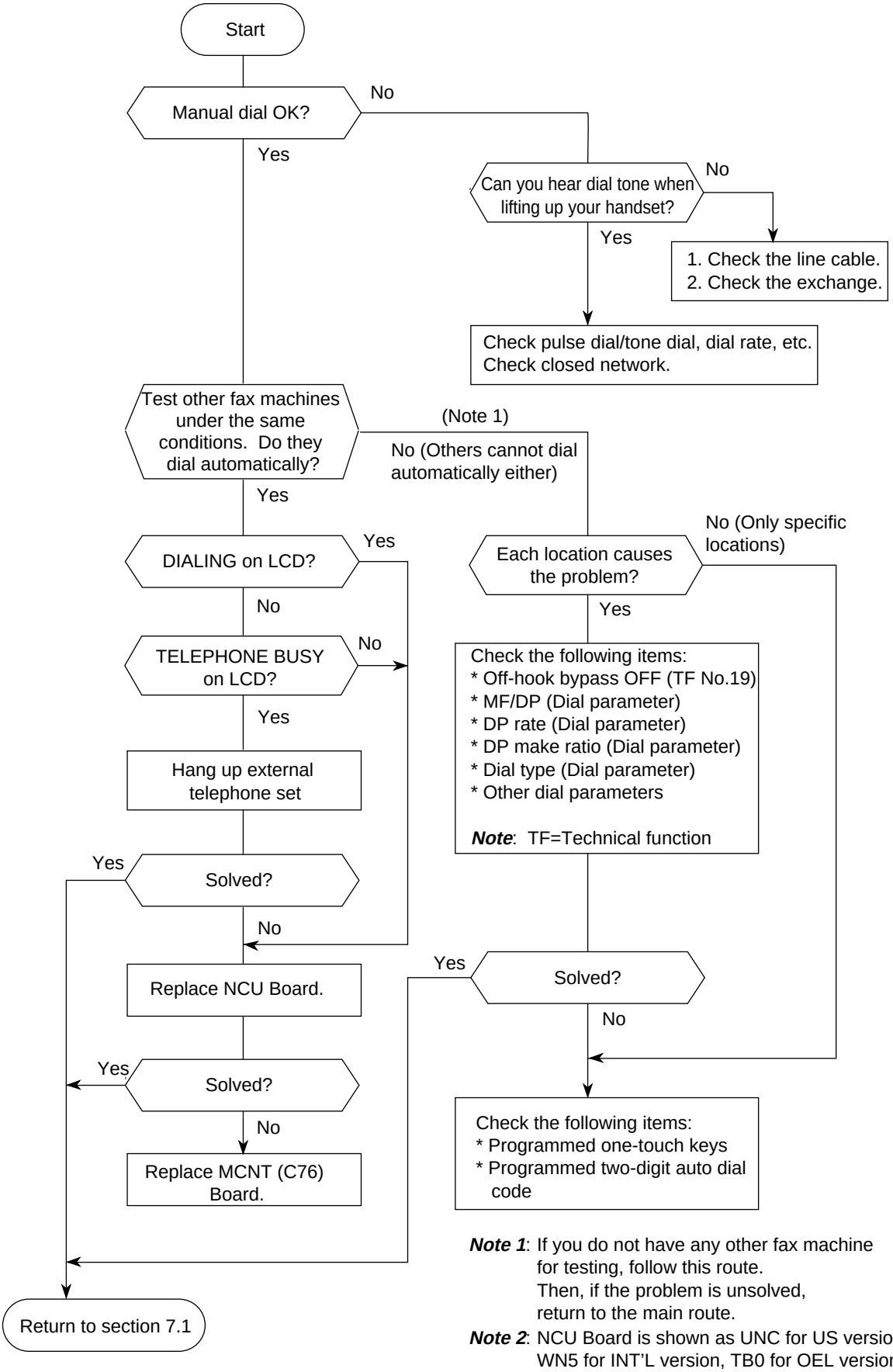
7.4 Printing Test Failure



7.5 No Local Copy



7.6 Auto Dial Failure

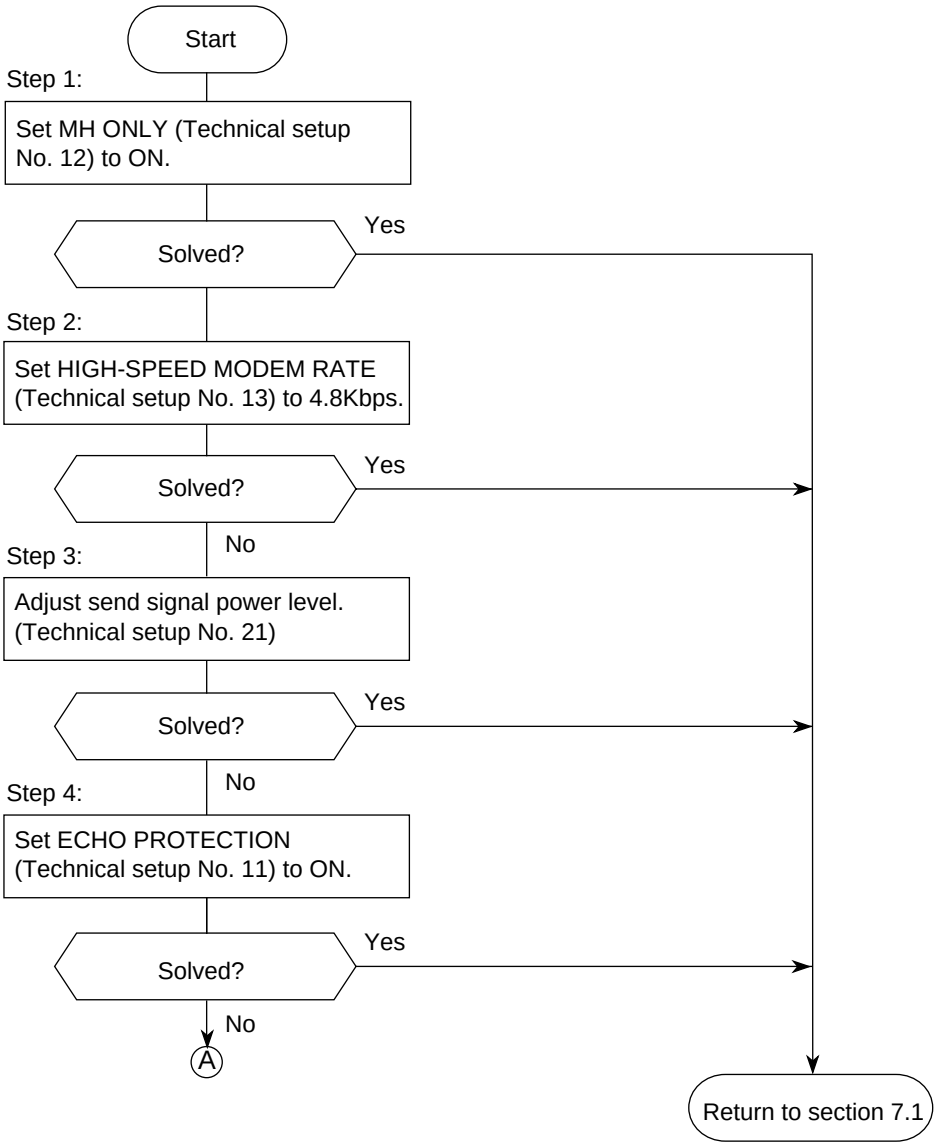


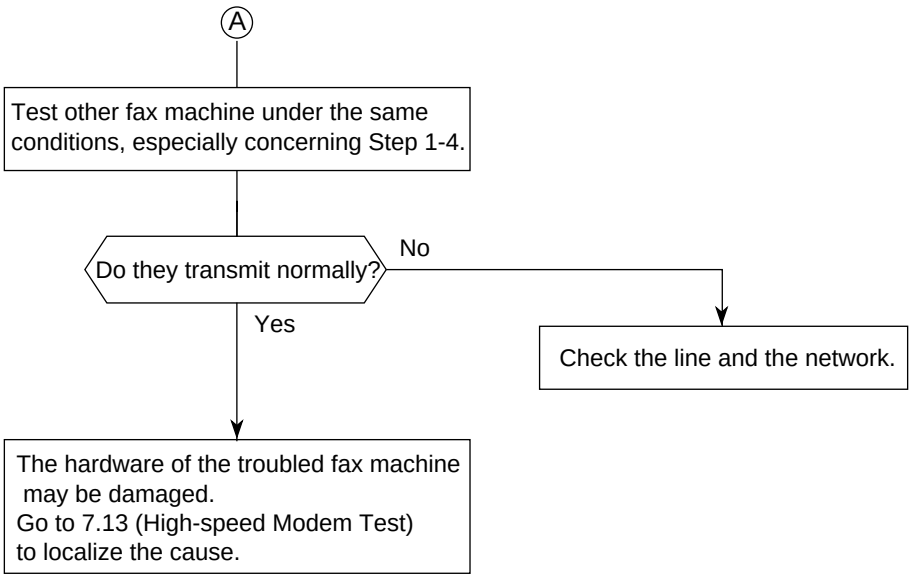
Note 1: If you do not have any other fax machine for testing, follow this route. Then, if the problem is unsolved, return to the main route.

Note 2: NCU Board is shown as UNC for US version, WN5 for INT'L version, TB0 for OEL version.

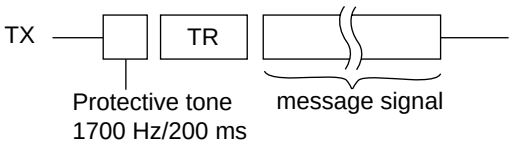
7.7 Transmission Problem

This section explains how to localize the cause of problems occurred after completion of connection with a remote station.

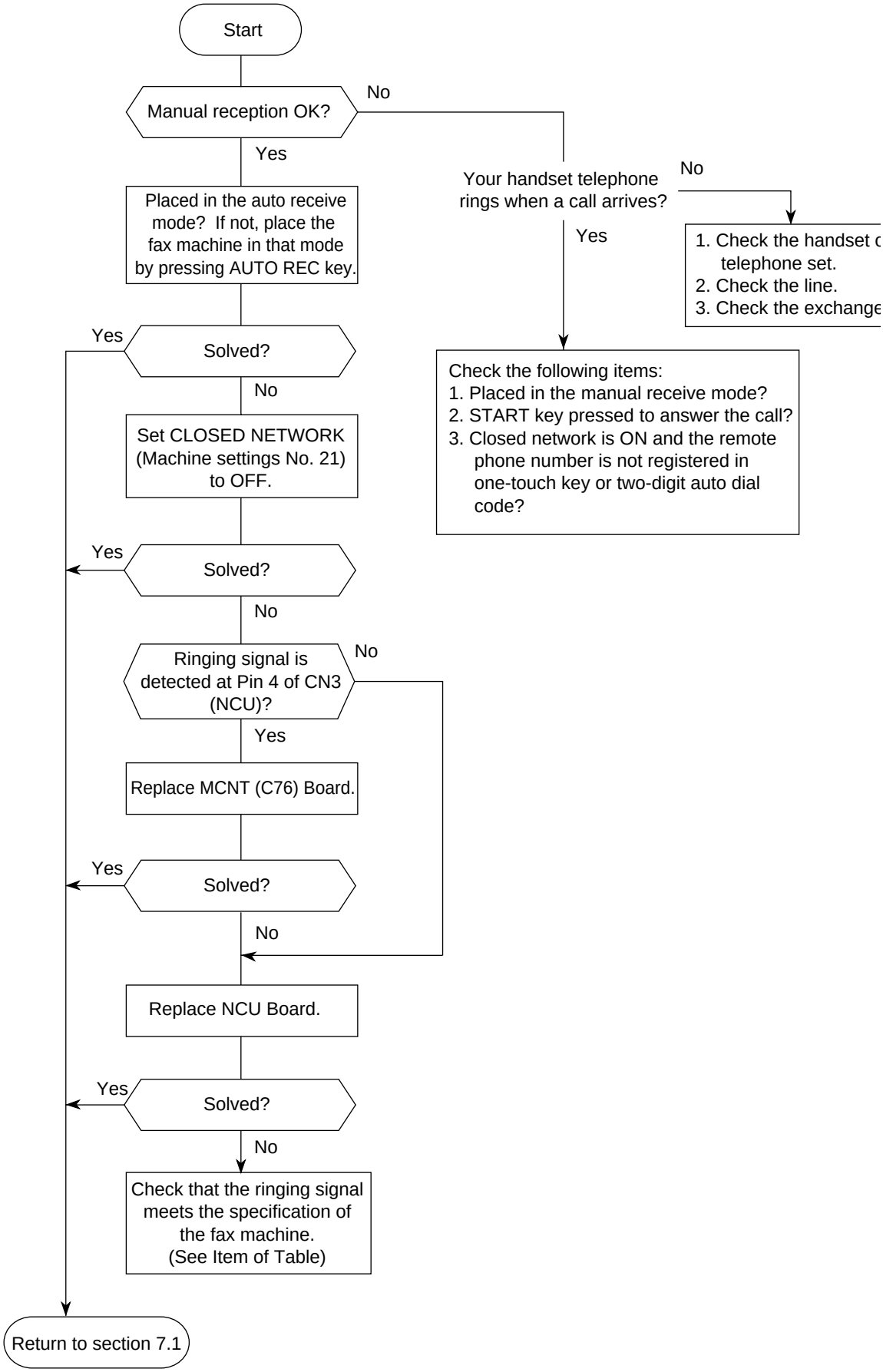



A
Test other fax machine under the same conditions, especially concerning Step 1-4.
Do they transmit normally?
No
Yes
Check the line and the network.
The hardware of the troubled fax machine may be damaged.
Go to 7.13 (High-speed Modem Test) to localize the cause.

Description: Protective tone is 1700 Hz/200 ms.
This signal is added to training signal to protect the training signal against echo as follows.

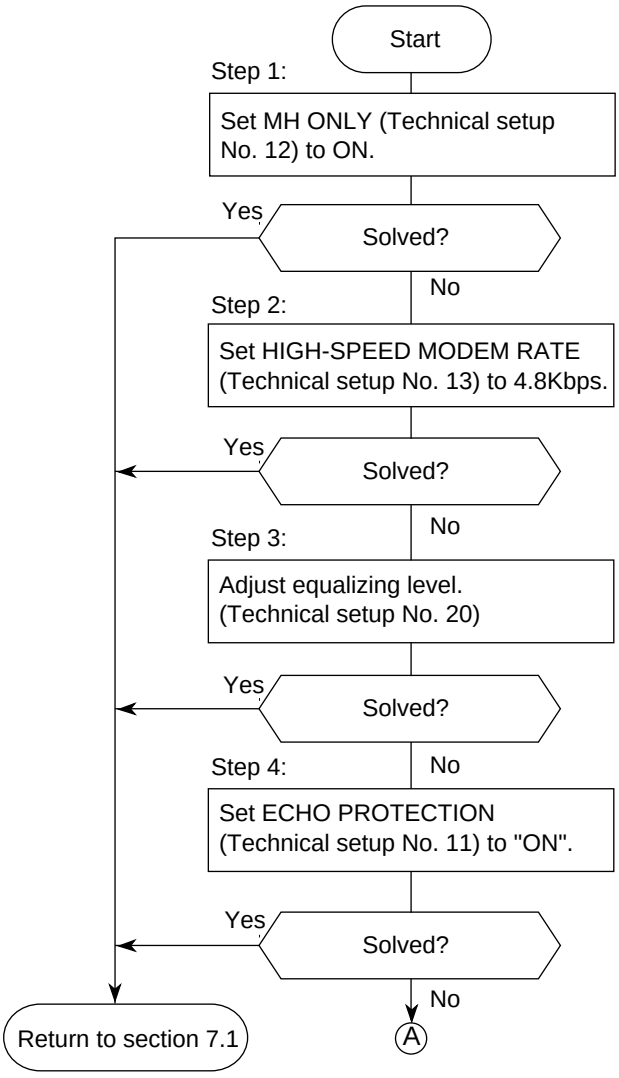


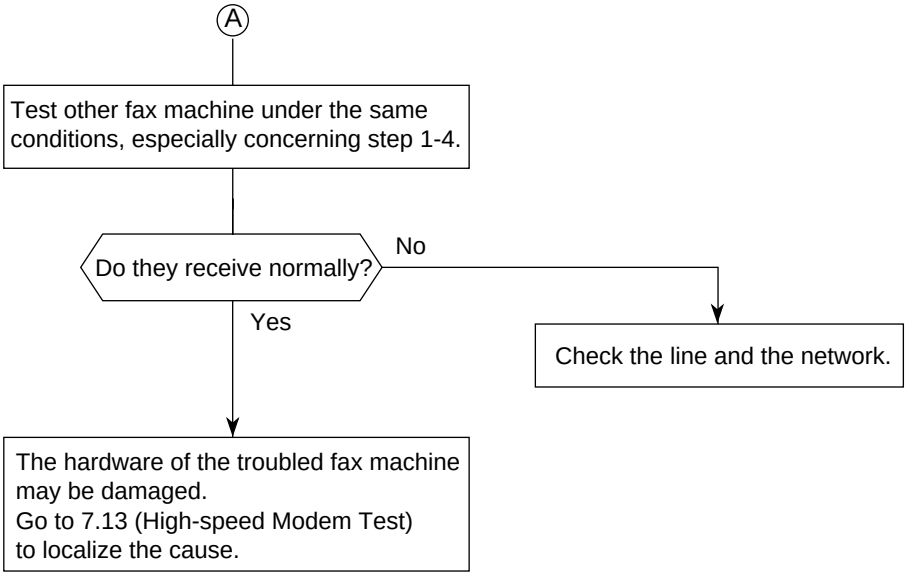
7.8 Auto Reception Failure


Start
Manual reception OK?
No
Yes
Your handset telephone rings when a call arrives?
No
Yes
1. Check the handset c telephone set.
2. Check the line.
3. Check the exchange
Placed in the auto receive mode? If not, place the fax machine in that mode by pressing AUTO REC key.
Yes
Solved?
No
Check the following items:
1. Placed in the manual receive mode?
2. START key pressed to answer the call?
3. Closed network is ON and the remote phone number is not registered in one-touch key or two-digit auto dial code?
Set CLOSED NETWORK (Machine settings No. 21) to OFF.
Yes
Solved?
No
Ringing signal is detected at Pin 4 of CN3 (NCU)?
No
Yes
Replace MCNT (C76) Board.
Yes
Solved?
No
Replace NCU Board.
Yes
Solved?
No
Check that the ringing signal meets the specification of the fax machine. (See Item of Table)
Return to section 7.1

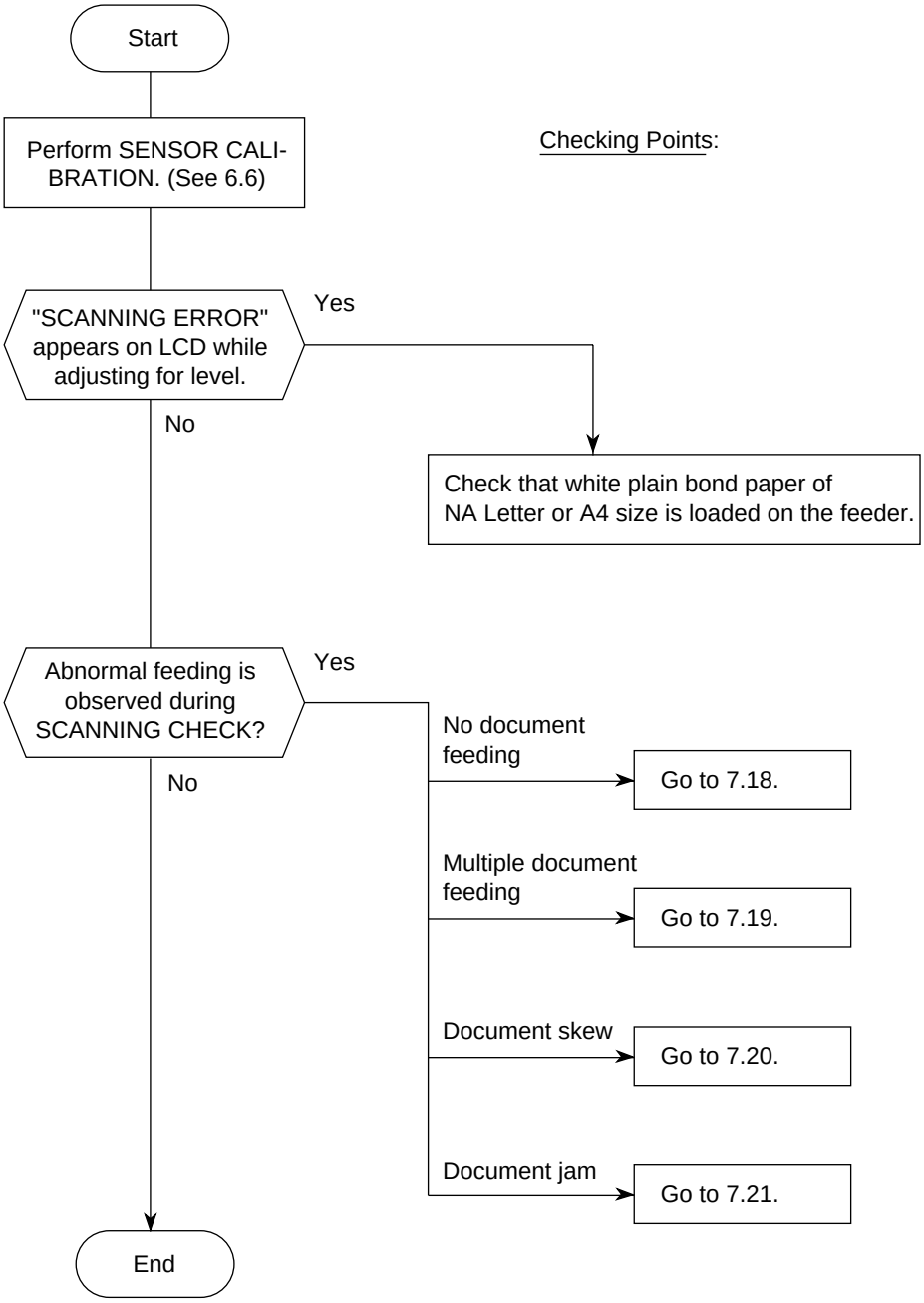
7.9 Reception Problem

This section explains how to localize the cause of problems occurred after completion of connection with a remote station.

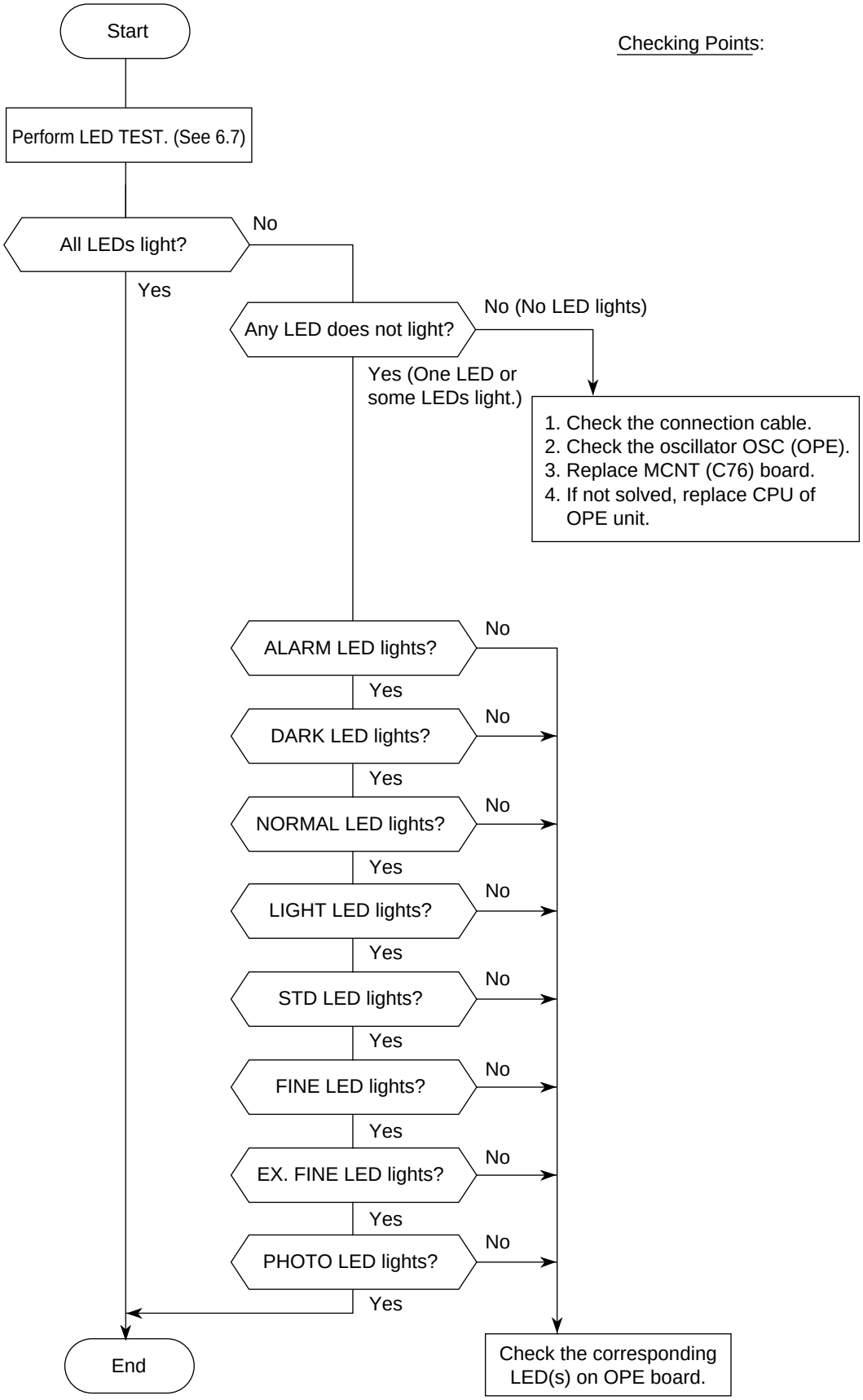



A
Test other fax machine under the same conditions, especially concerning step 1-4.
Do they receive normally?
No
Yes
Check the line and the network.
The hardware of the troubled fax machine may be damaged.
Go to 7.13 (High-speed Modem Test) to localize the cause.

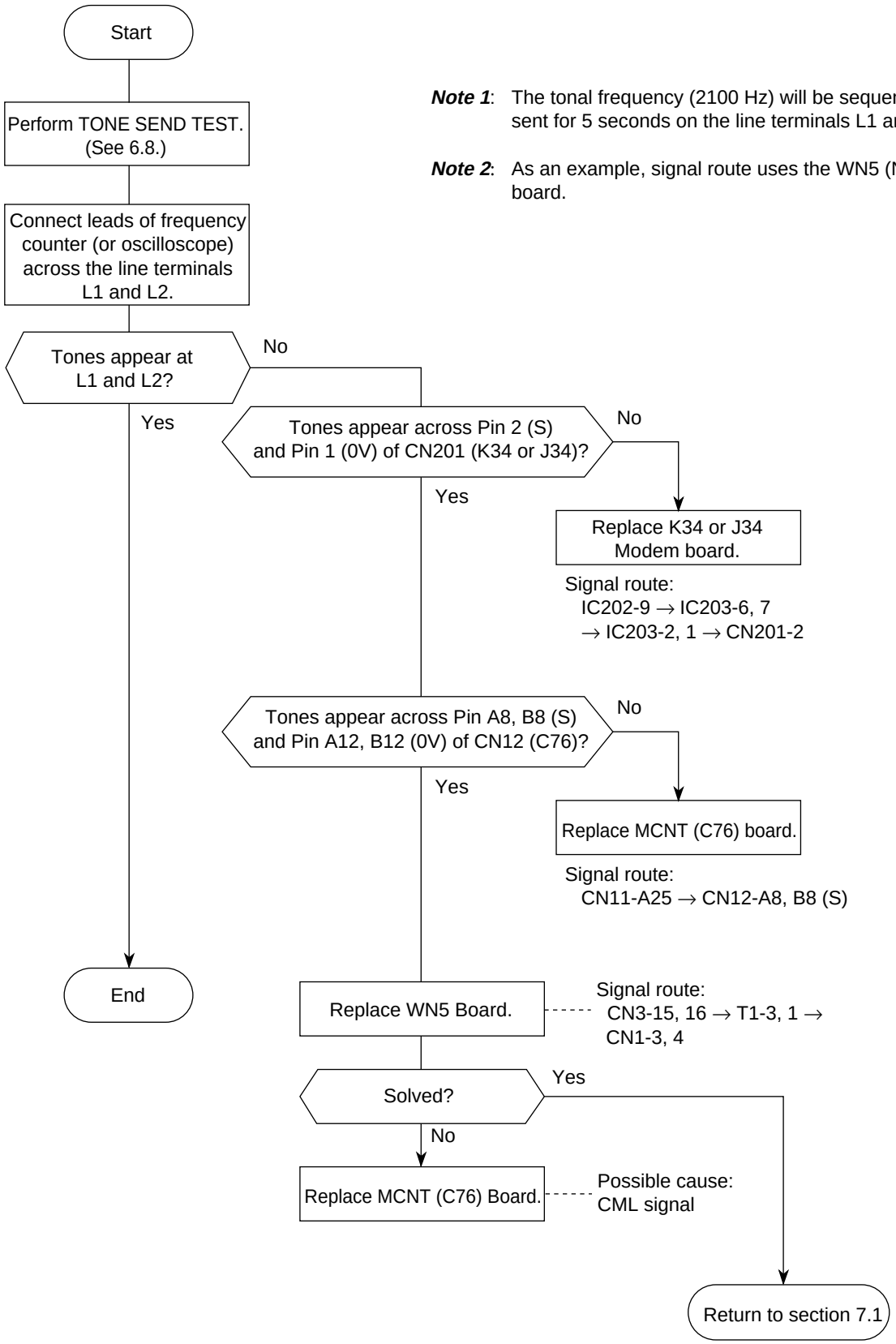
7.10 Sensor Calibration Test



7.11 LED Test


Start
Perform LED TEST. (See 6.7)
All LEDs light?
No
Yes
Any LED does not light?
No (No LED lights)
Yes (One LED or some LEDs light.)
Checking Points:
1. Check the connection cable.
2. Check the oscillator OSC (OPE).
3. Replace MCNT (C76) board.
4. If not solved, replace CPU of OPE unit.
ALARM LED lights?
DARK LED lights?
NORMAL LED lights?
LIGHT LED lights?
STD LED lights?
FINE LED lights?
EX. FINE LED lights?
PHOTO LED lights?
No
Yes
End
Check the corresponding LED(s) on OPE board.

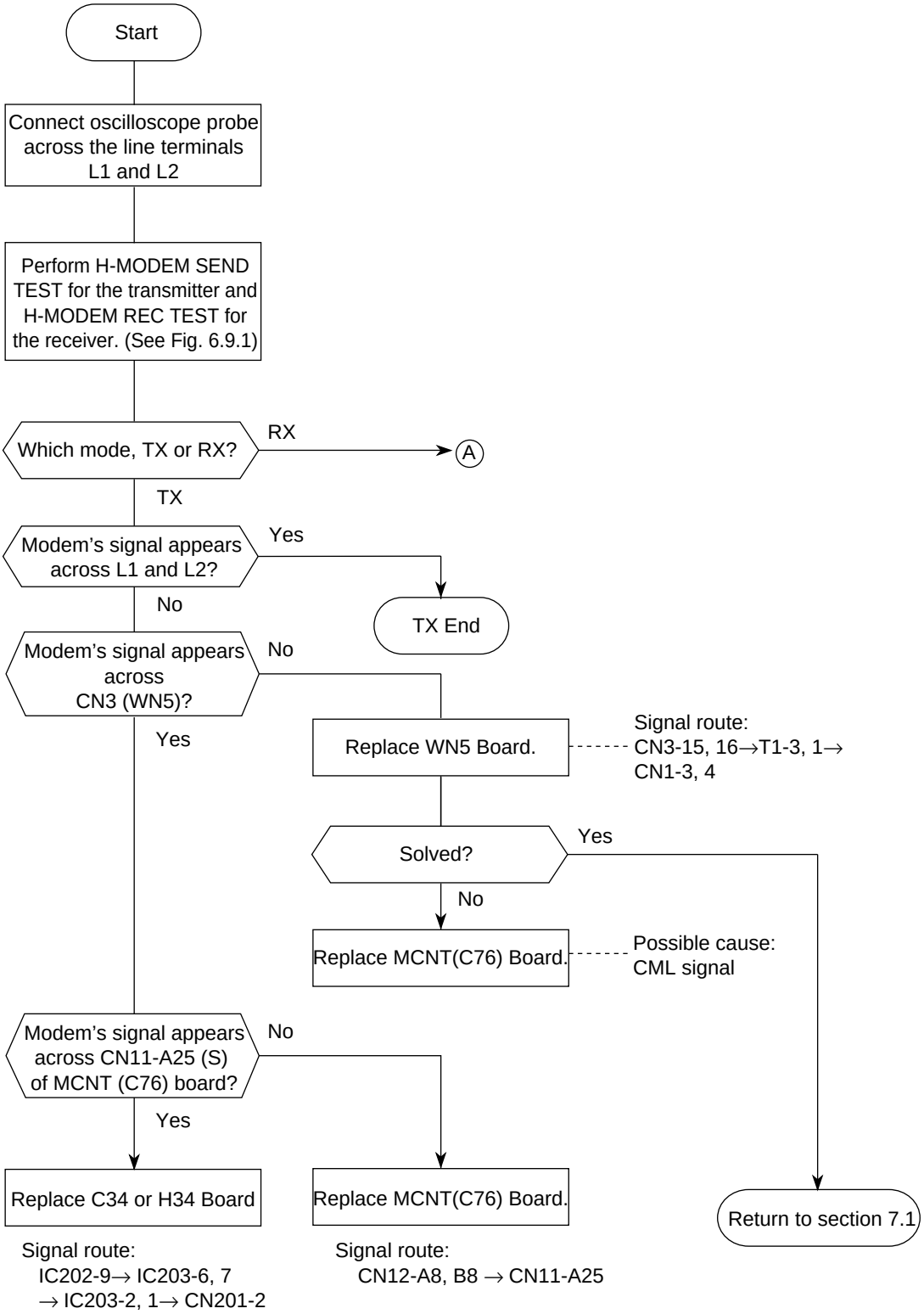
7.12 Tone Send Test

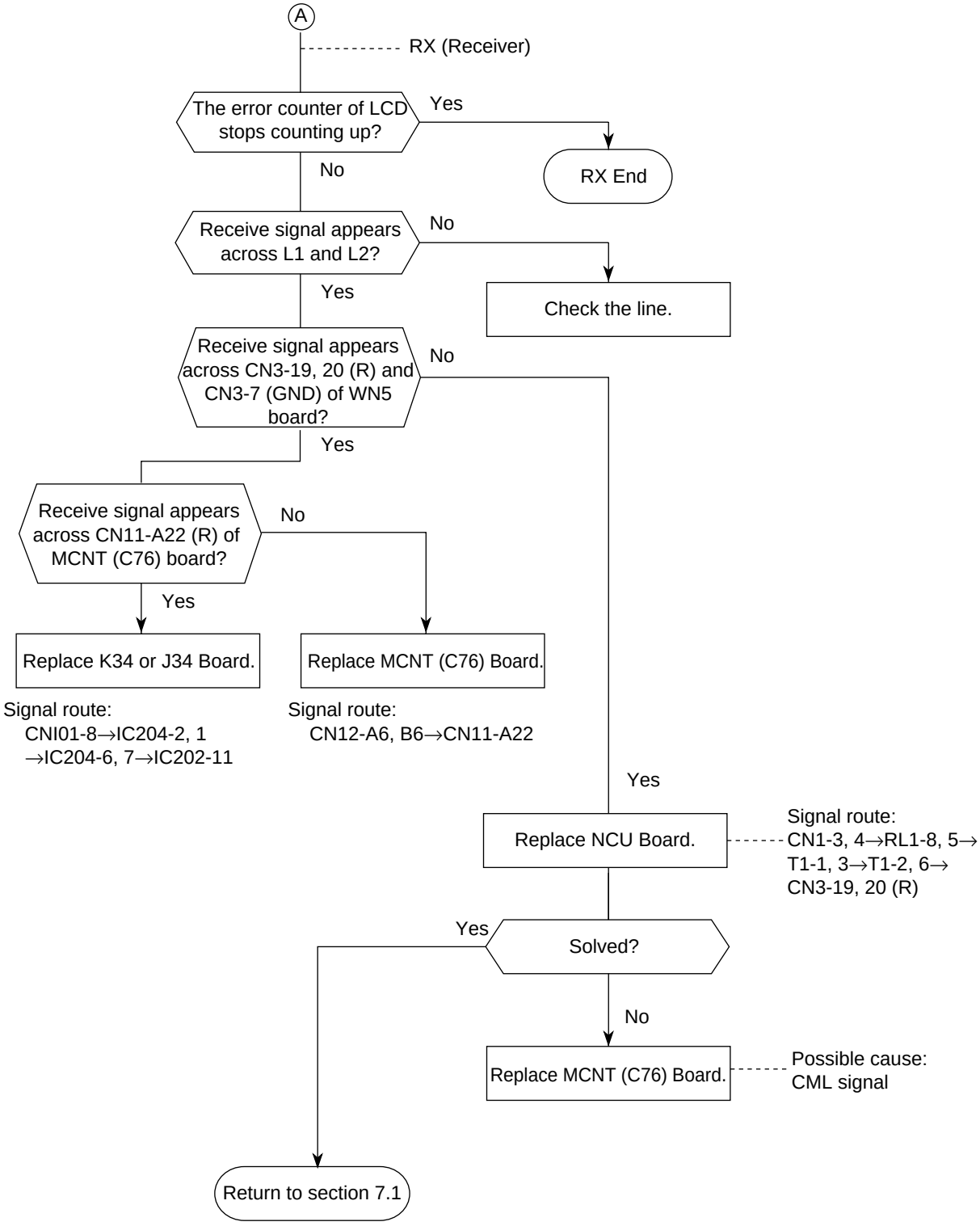

Start
Perform TONE SEND TEST. (See 6.8.)
Connect leads of frequency counter (or oscilloscope) across the line terminals L1 and L2.
Tones appear at L1 and L2?
No
Yes
Tones appear across Pin 2 (S) and Pin 1 (0V) of CN201 (K34 or J34)?
No
Yes
Replace K34 or J34 Modem board.
Signal route:
IC202-9 → IC203-6, 7
→ IC203-2, 1 → CN201-2
Tones appear across Pin A8, B8 (S) and Pin A12, B12 (0V) of CN12 (C76)?
No
Yes
Replace MCNT (C76) board.
Signal route:
CN11-A25 → CN12-A8, B8 (S)
End
Replace WN5 Board.
Signal route:
CN3-15, 16 → T1-3, 1 → CN1-3, 4
Solved?
Yes
No
Replace MCNT (C76) Board.
Possible cause:
CML signal
Return to section 7.1

Note 1: The tonal frequency (2100 Hz) will be sequentially sent for 5 seconds on the line terminals L1 and L2.

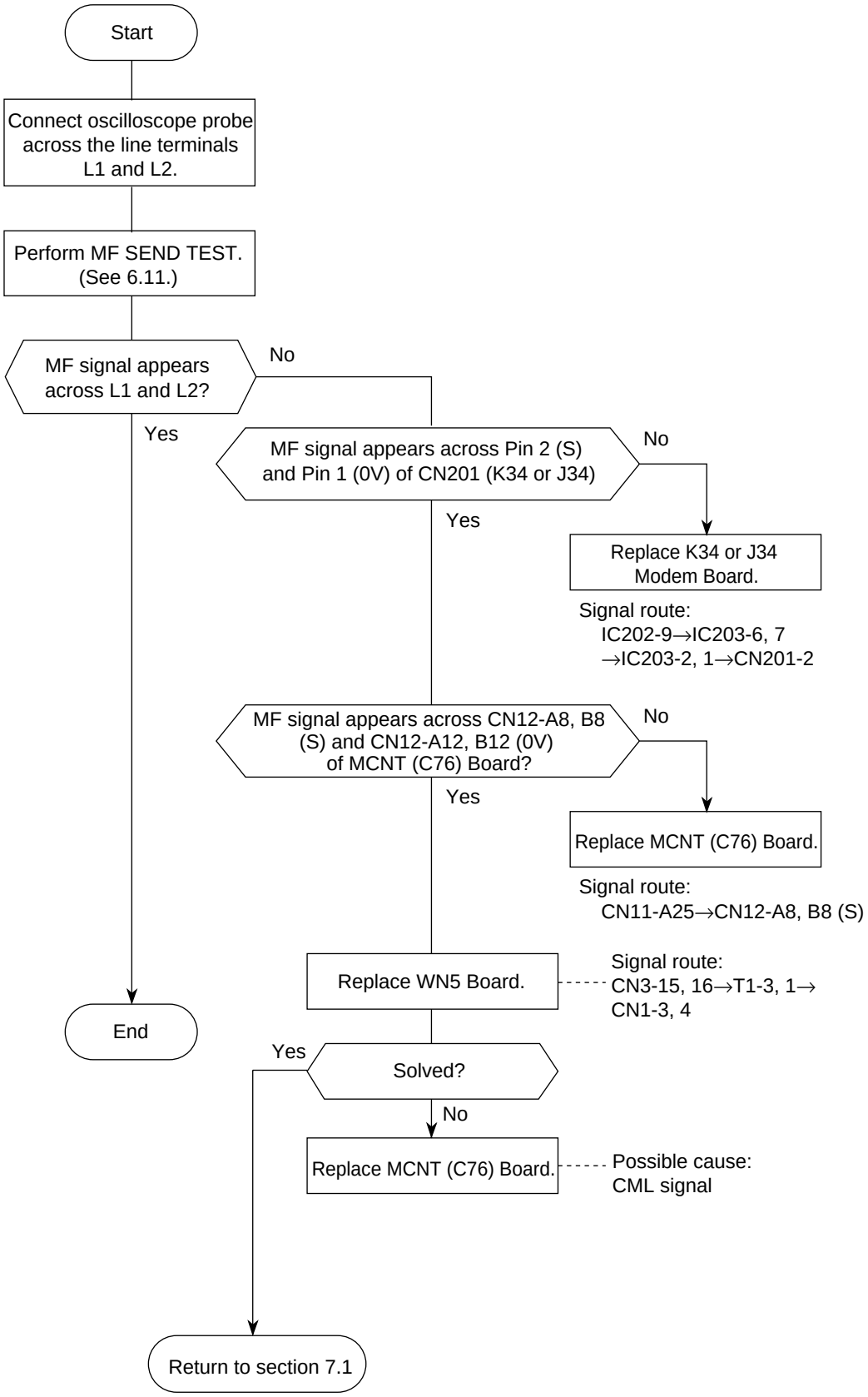
Note 2: As an example, signal route uses the WN5 (NCU) board.

7.13 High-speed Modem Test

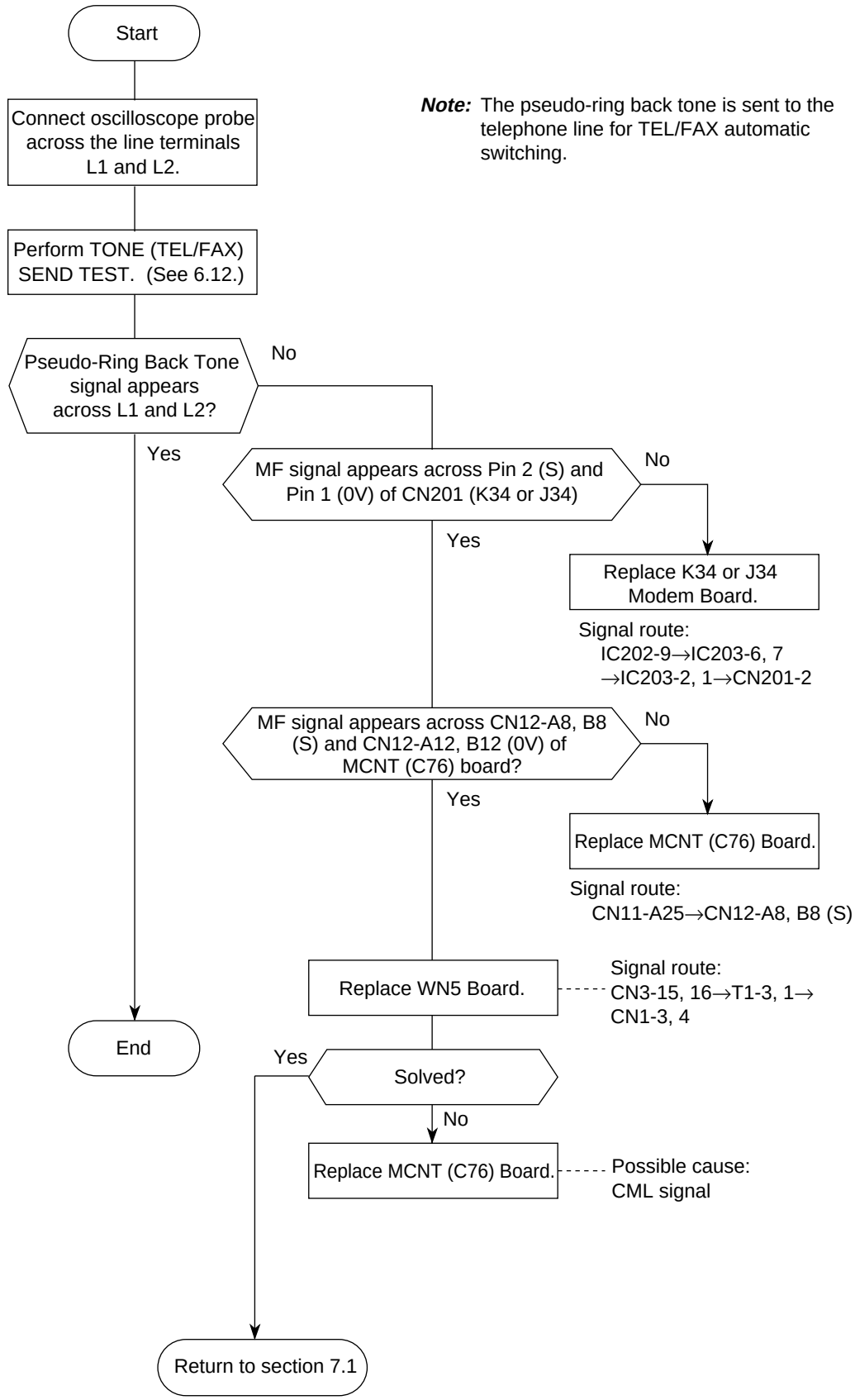



A
RX (Receiver)
The error counter of LCD stops counting up?
Yes
RX End
No
Receive signal appears across L1 and L2?
No
Check the line.
Yes
Receive signal appears across CN3-19, 20 (R) and CN3-7 (GND) of WN5 board?
No
Yes
Receive signal appears across CN11-A22 (R) of MCNT (C76) board?
No
Yes
Replace K34 or J34 Board.
Signal route:
CNI01-8→IC204-2, 1
→IC204-6, 7→IC202-11
Replace MCNT (C76) Board.
Signal route:
CN12-A6, B6→CN11-A22
Yes
Replace NCU Board.
Signal route:
CN1-3, 4→RL1-8, 5→
T1-1, 3→T1-2, 6→
CN3-19, 20 (R)
Yes
Solved?
No
Replace MCNT (C76) Board.
Possible cause:
CML signal
Return to section 7.1

7.14 MF Send Test



7.15 Tone (TEL/FAX) Send Test

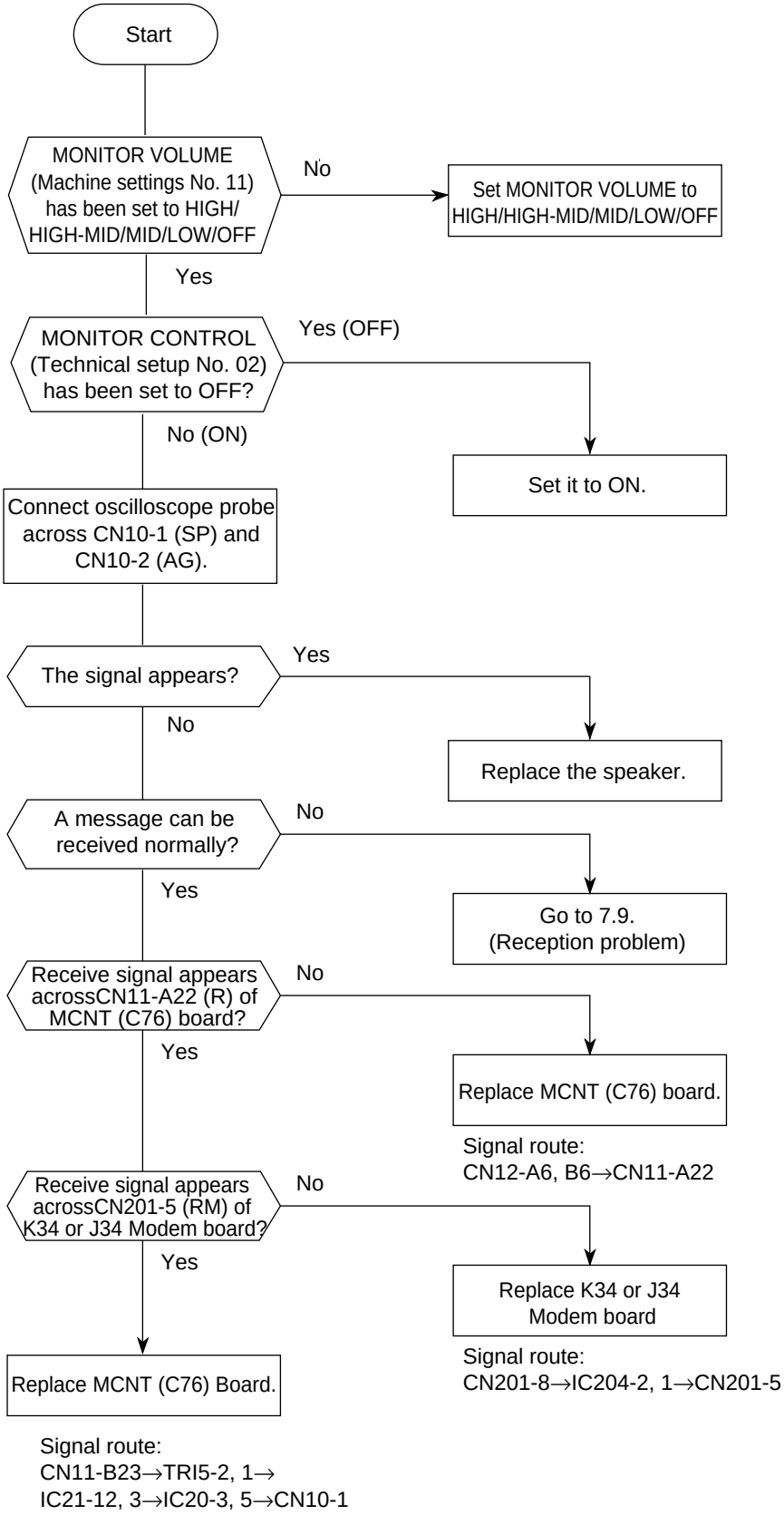


Note: The pseudo-ring back tone is sent to the telephone line for TEL/FAX automatic switching.

7.16 No Acoustic Line Monitor

There are two source routes of acoustic line monitor:

(a) General communication signal
(b) DP pulse signal



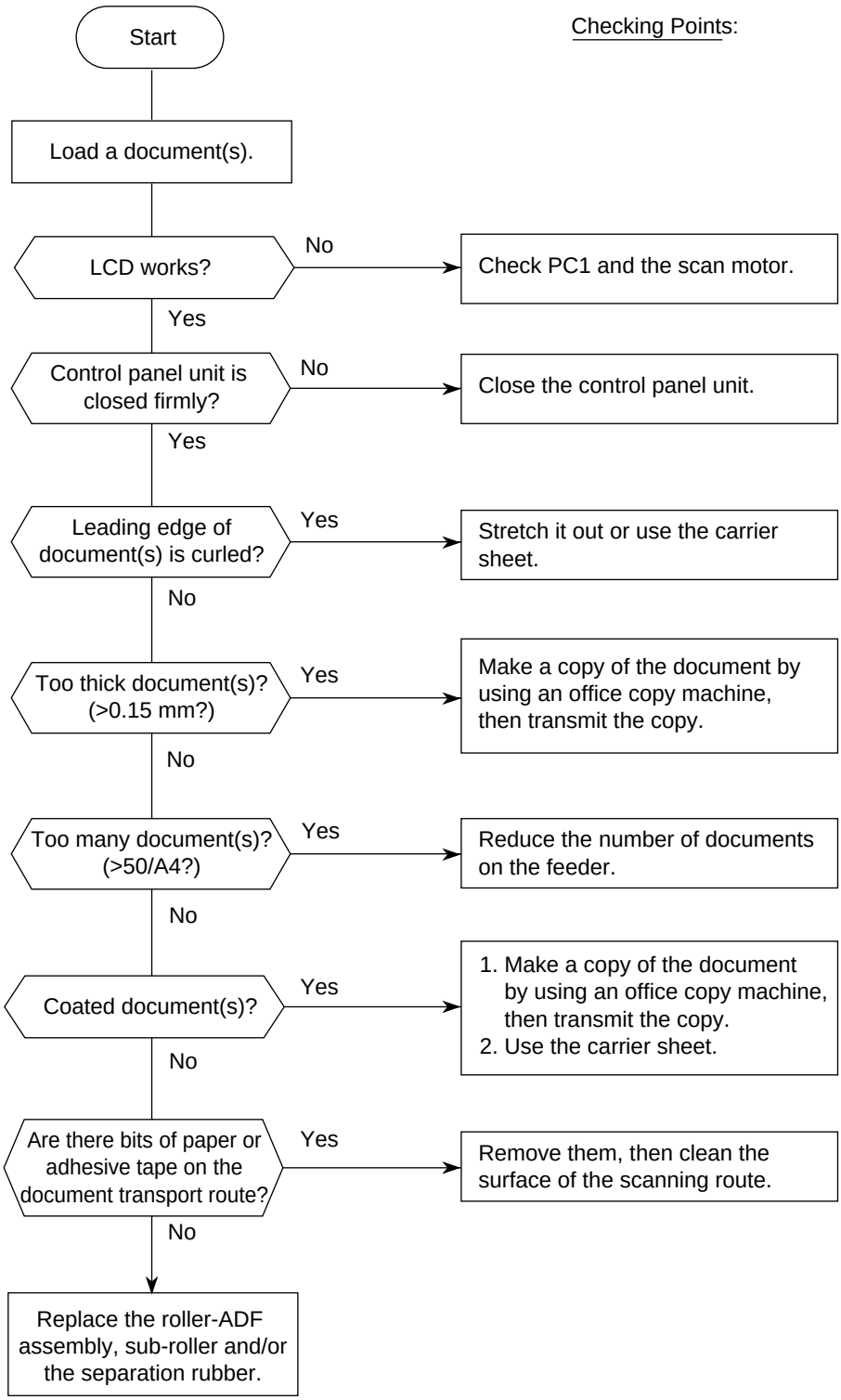
7.17 Power Supply Unit

(A) Low-voltage Selection
Replace the Power Supply Unit when output voltage written on the item A3 in the Appendix A is not normal.

(B) High-voltage Selection (H10 board)

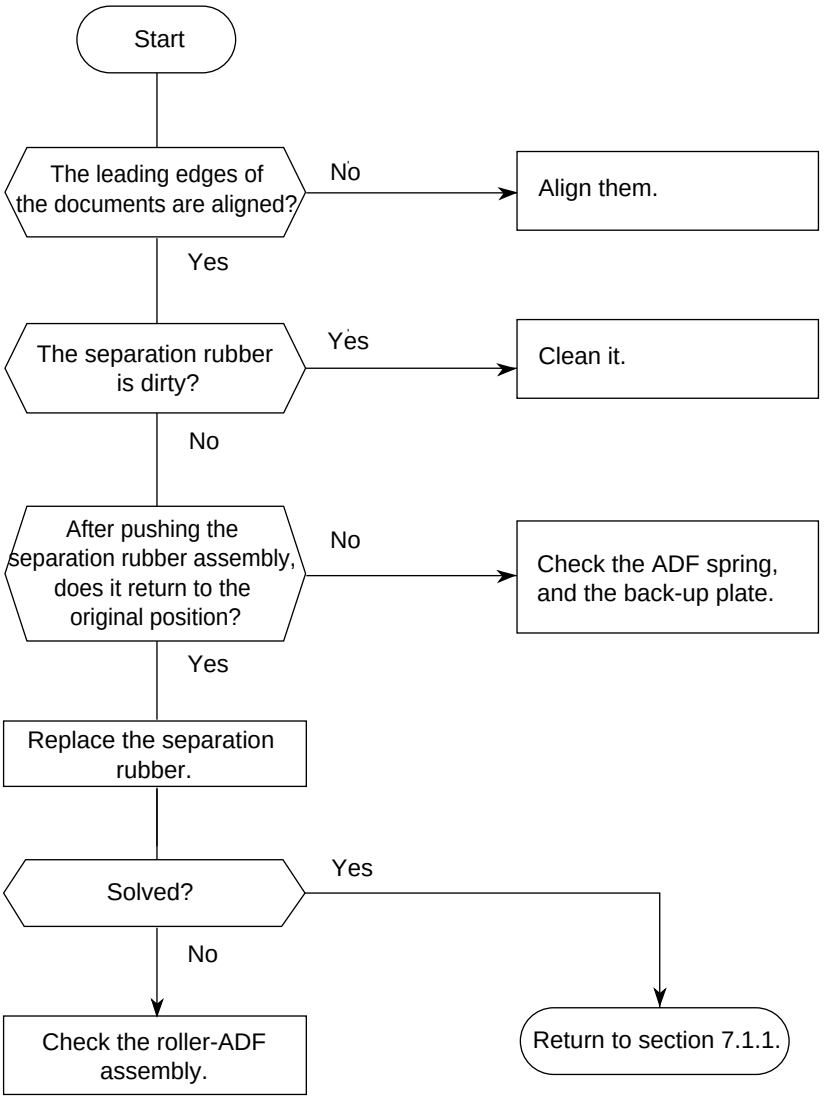
7.18 No Document Feeding

Note: This section places an emphasis on troubleshooting of mechanical portions. Therefore, it is recommended to replace the MCNT (C76) Board first and, then if not solved, follow this flow chart.

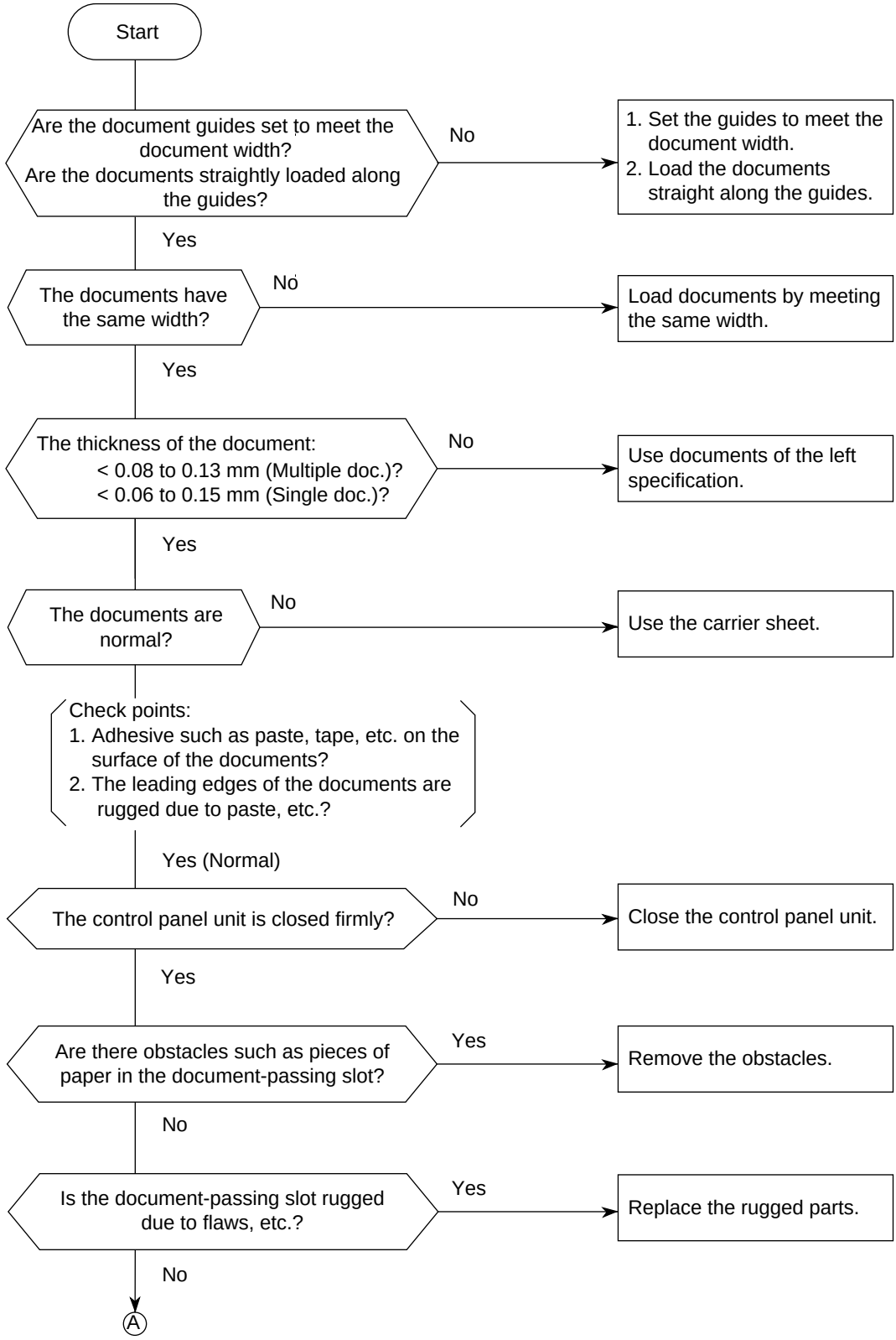

Start
Checking Points:
Load a document(s).
LCD works?
No
Check PC1 and the scan motor.
Yes
Control panel unit is closed firmly?
No
Close the control panel unit.
Yes
Leading edge of document(s) is curled?
Yes
Stretch it out or use the carrier sheet.
No
Too thick document(s)? (>0.15 mm?)
Yes
Make a copy of the document by using an office copy machine, then transmit the copy.
No
Too many document(s)? (>50/A4?)
Yes
Reduce the number of documents on the feeder.
No
Coated document(s)?
Yes
1. Make a copy of the document by using an office copy machine, then transmit the copy.
2. Use the carrier sheet.
No
Are there bits of paper or adhesive tape on the document transport route?
Yes
Remove them, then clean the surface of the scanning route.
No
Replace the roller-ADF assembly, sub-roller and/or the separation rubber.

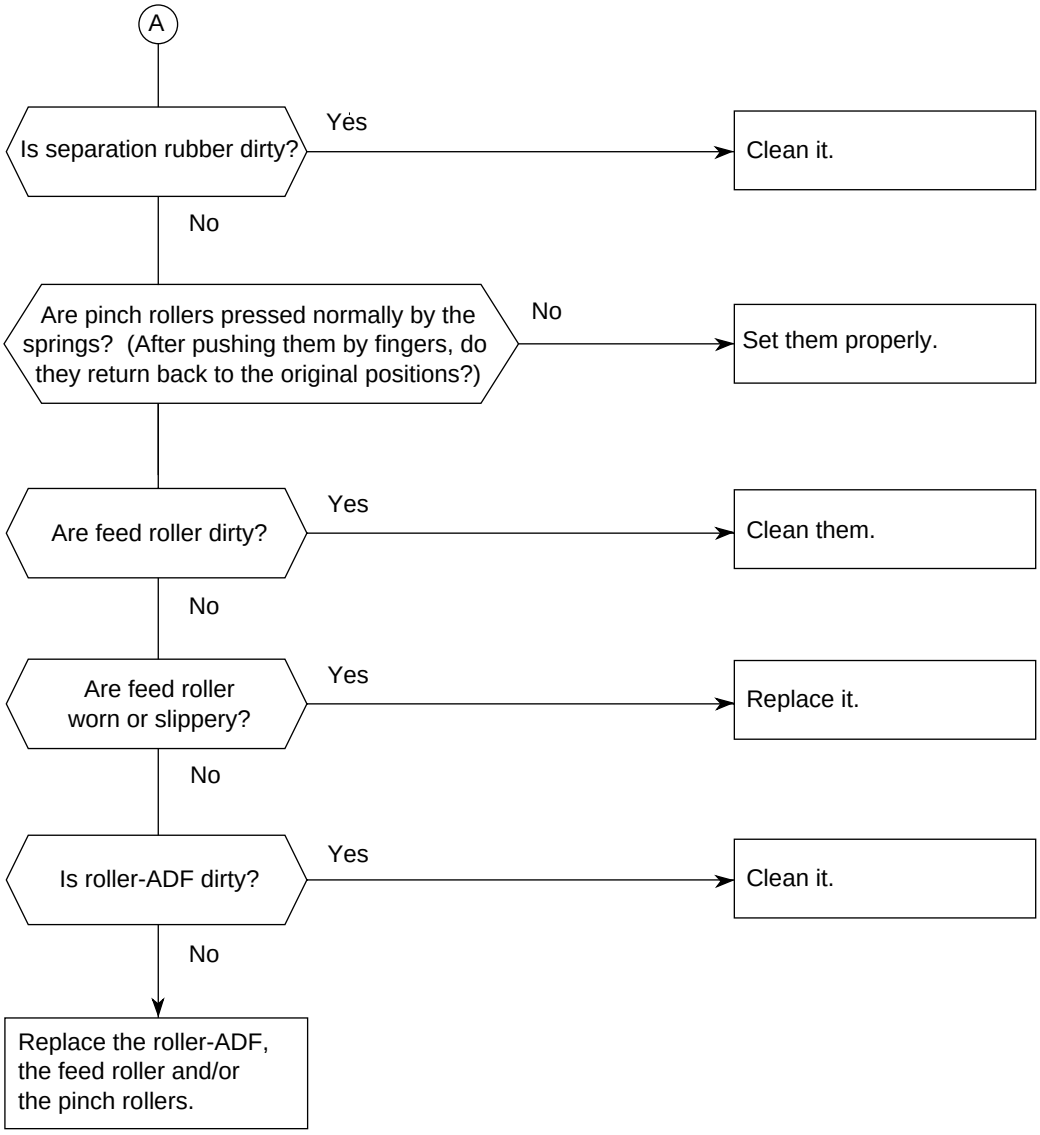
7.19 Multiple Document Feeding

Definition: Multiple document feeding.
Multiple documents are not separated and they are fed in the same one feeding operation.

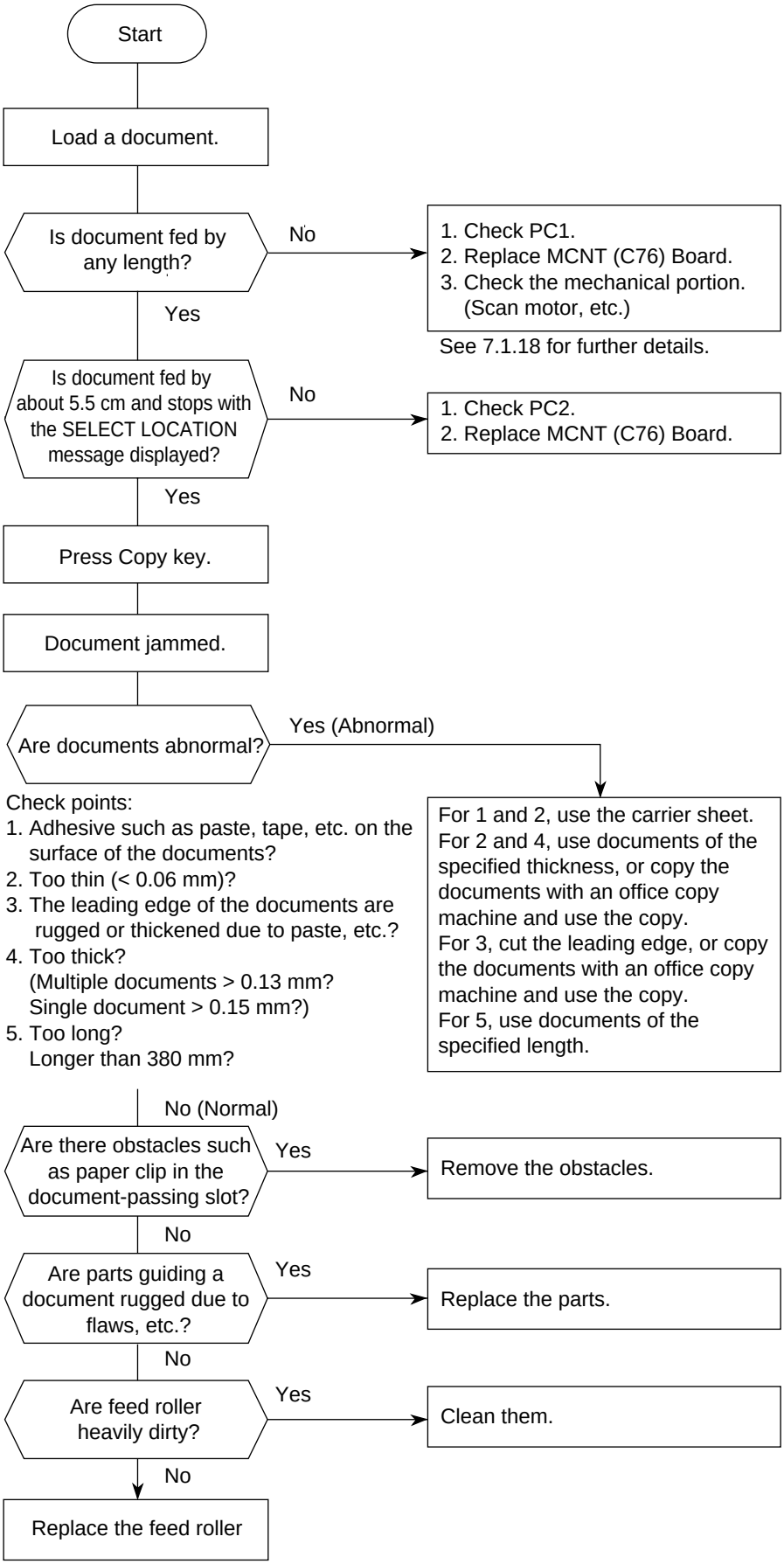


7.20 Document Skew


Start
Are the document guides set to meet the document width?
Are the documents straightly loaded along the guides?
No
1. Set the guides to meet the document width.
2. Load the documents straight along the guides.
Yes
The documents have the same width?
No
Load documents by meeting the same width.
Yes
The thickness of the document:
< 0.08 to 0.13 mm (Multiple doc.)?
< 0.06 to 0.15 mm (Single doc.)?
No
Use documents of the left specification.
Yes
The documents are normal?
No
Use the carrier sheet.
Check points:
1. Adhesive such as paste, tape, etc. on the surface of the documents?
2. The leading edges of the documents are rugged due to paste, etc.?
Yes (Normal)
The control panel unit is closed firmly?
No
Close the control panel unit.
Yes
Are there obstacles such as pieces of paper in the document-passing slot?
Yes
Remove the obstacles.
No
Is the document-passing slot rugged due to flaws, etc.?
Yes
Replace the rugged parts.
No
A


A
Is separation rubber dirty?
Yes
Clean it.
No
Are pinch rollers pressed normally by the springs? (After pushing them by fingers, do they return back to the original positions?)
No
Set them properly.
Are feed roller dirty?
Yes
Clean them.
No
Are feed roller worn or slippery?
Yes
Replace it.
No
Is roller-ADF dirty?
Yes
Clean it.
No
Replace the roller-ADF, the feed roller and/or the pinch rollers.

7.21 Document Jam



7.22 Printer Unit

7.22.1 Precautions

1. Points to check before correcting image troubles
   (1) Is the printer being run in proper ambient conditions?
   (2) Have the supplies (toner) and the routine replacement part (ID unit) been replaced properly?
   (3) Is the recording paper normal?
   (4) Has the ID unit been loaded properly?

2. Tips for correcting image troubles
   (1) Do not touch, or bring foreign matter into contact with the surface of the drum.
   (2) Do not expose the drum to direct sunlight.
   (3) Keep hands off the fuser unit as it is heated during operation.
   (4) Do not expose the drum to light for longer than 5 minutes at room temperature.

7.22.2 Troubleshooting Flow Charts of Printer Unit

Overall troubleshooting flow chart:

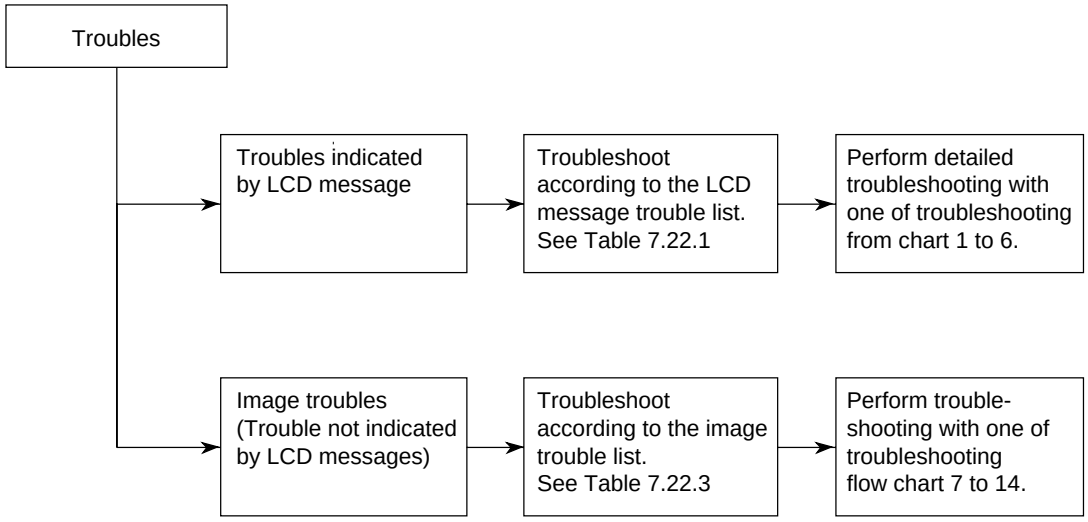

Troubles
Troubles indicated by LCD message
Troubleshoot according to the LCD message trouble list. See Table 7.22.1
Perform detailed troubleshooting with one of troubleshooting from chart 1 to 6.
Image troubles (Trouble not indicated by LCD messages)
Troubleshoot according to the image trouble list. See Table 7.22.3
Perform trouble-shooting with one of troubleshooting flow chart 7 to 14.

Table 7.22.1 LCD Message Trouble List

Category	LCD message display	Trouble	Troubleshooting flow chart number
Cover open	See "Table 7.22.2 Alarm Display".	The cover (cover-top) is open.	1
Image drum alarm	See "Table 7.22.2 Alarm Display".	Warning message to replace EP unit because of its life.	2
Engine errors	See "Table 7.22.2 Alarm Display".	Engine controller error	3
	See "Table 7.22.2 Alarm Display".	Fuser unit thermal error	4
Recording paper/jam error	See "Table 7.22.2 Alarm Display".	Recording paper feed jam, transport jam, ejection jam, recording size error	5
Paper cassette request	See "Table 7.22.2 Alarm Display".	No recording paper tray or no recording paper	6
Daily status	See "Table 7.22.2 Alarm Display".	Toner is running short. Note: No toner memory RX is ON.	
	See "Table 7.22.2 Alarm Display".	Toner is running short. Note: No toner memory RX is OFF.	

Table 7.22.2 Alarm Display (1/4)

ALARM	LCD	LED
Flash memory error (data)	12:00 XXX MEMORY ERROR	ON
Second tray time-out error	12:00 TEL PRINTER ALARM2 REFER TO USER GUIDE MEMORY FREE 100%	ON
ID lock	12:00 TEL INVALID DRUM CART. REFER TO USER GUIDE MEMORY FREE 100%	ON
Toner lock	12:00 TEL INVALID TONER CART. REFER TO USER GUIDE MEMORY FREE 100%	ON
Thermister error	12:00 TEL PRINTER ALARM4 REFER TO USER GUIDE MEMORY FREE 100%	ON
Fan motor error	12:00 TEL PRINTER ALARM3 REFER TO USER GUIDE MEMORY FREE 100%	ON
Cover open	12:00 XXX CLOSE THE COVER MEMORY FREE 100%	ON
Document jam (limit length error)	11/01/2000 12:00 XXX DOCUMENT JAM CONFIRM AND "STOP" MEMORY FREE 100%	ON

Table 7.22.2 Alarm Display (2/4)

ALARM	LCD	LED
Document jam (suction error)	11/01/2000 12:00 XXX RELOAD DOCUMENT MEMORY FREE 100%	ON
Paper jam (feed outlet error) Paper jam (path error)	12:00 XXX PAPER JAM CHECK PAPER OR PATH MEMORY FREE 100%	ON
Paper jam (feed error)	12:00 XXX PAPER MISS FEED CHECK PAPER OR PATH MEMORY FREE 100%	ON
Paper size error	12:00 XXX PAPER SIZE ERROR CHECK PAPER OR PATH MEMORY FREE 100%	ON
No paper	12:00 XXX PAPER SUPPLY OUT CHECK PAPER SUPPLY MEMORY FREE 100%	ON
Face-up	12:00 XXX FACE UP STACKING SWITCH OUTPUT LEVER MEMORY FREE 100%	ON
Drum life expired Toner near end (Toner near end & drum counter ≥ 19000)	12:00 XXX CHANGE DRUM SOON MEMORY FREE 100%	ON
No ID (Image Drum)	12:00 XXX TONER SENSOR CHECK DRUM CART. MEMORY FREE 100%	ON
Toner near end (NO TONER MEM. RX = OFF)	12:00 XXX REPLACE TONER CART. MEMORY FREE 100%	OFF

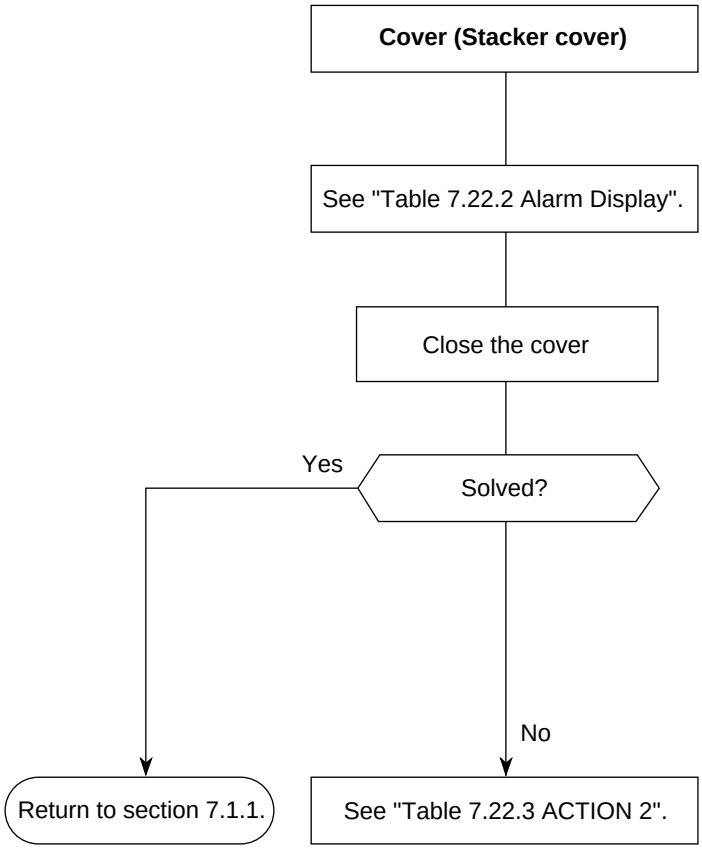
Table 7.22.2 Alarm Display (3/4)

ALARM	LCD	LED
Toner near end (NO TONER EM. RX = ON)	12:00 XXX TONER LOW REPLACE TONER CART. MEMORY FREE 100%	ON
Second tray cover open	12:00 XXX CLOSE THE 2ND COVER MEMORY FREE 100%	OFF
Memory overflow	12:00 XXX MEMORY OVERFLOW REFER TO USER GUIDE MEMORY FREE 100%	ON
Communication error	12:00 XXX COMMUN. ERROR MEMORY FREE 100%	ON
LAN/ISDN/G3 board MUPIS I/F error	12:00 XXX OPTION BOARD ERROR REFER TO USER GUIDE MEMORY FREE 100%	ON
F/W version errpr	12:00 XXX EACH F/W CONTRADICT MEMORY FREE 100%	ON
Error 77 (no ID)	12:00 XXX ERROR77 MEMORY FREE 100%	ON
LAN print ACC error	12:00 XXX LAN DATA ERROR REFER TO USER GUIDE MEMORY FREE 100%	ON

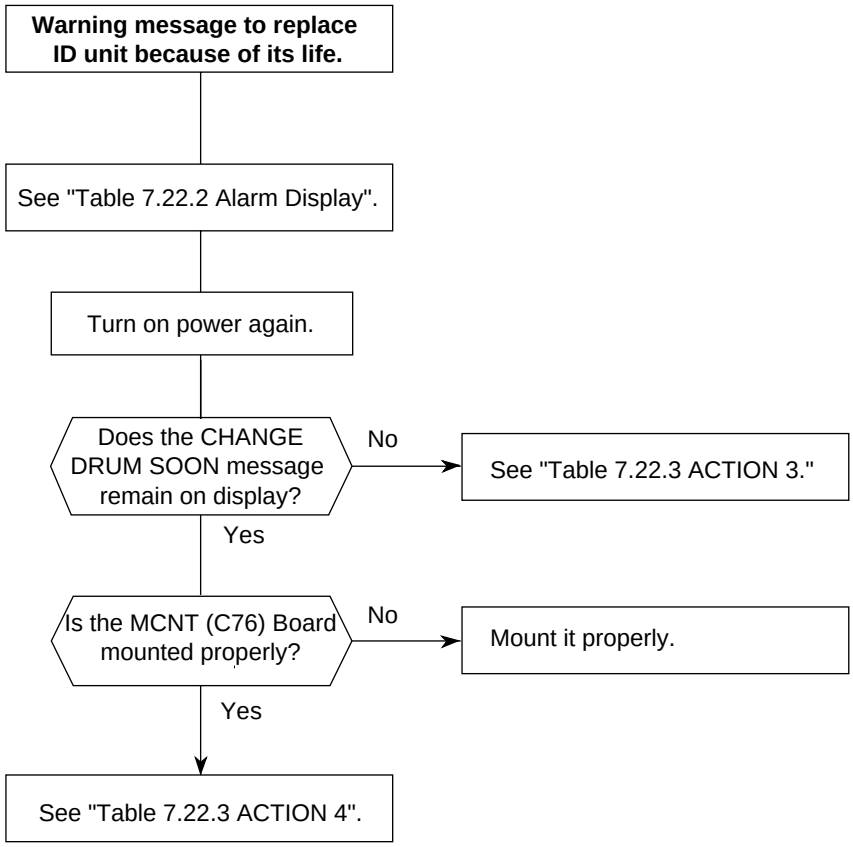
Table 7.22.2 Alarm Display (4/4)

ALARM	LCD	LED
During NIC initialization	12:00 XXX LAN INITIALIZING MEMORY FREE 100%	OFF
No recording paper on the 1'st tray Recording paper on the 2'nd tray	12:00 XXX PAPER OUT-1ST TRAY MEMORY FREE 100%	OFF
Recording paper on the 1'st tray No recording paper on the 2'nd tray	12:00 XXX PAPER OUT-2ND TRAY MEMORY FREE 100%	OFF

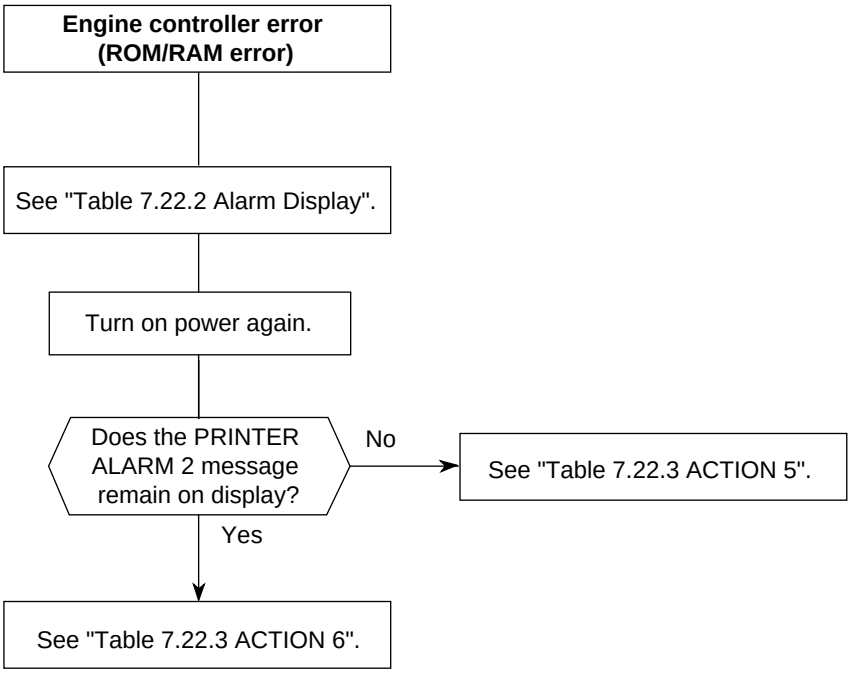
Troubleshooting flow chart 1:



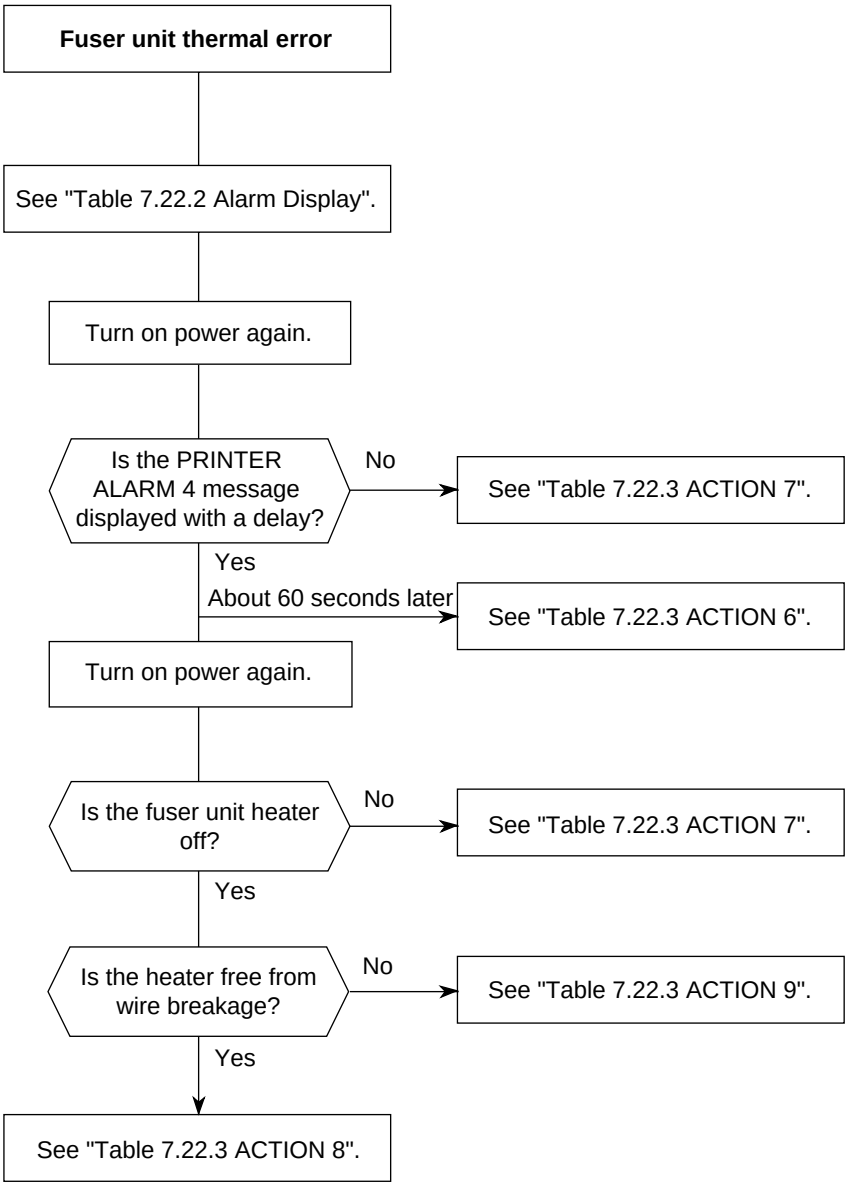
Troubleshooting flow chart 2:


Warning message to replace ID unit because of its life.
See "Table 7.22.2 Alarm Display".
Turn on power again.
Does the CHANGE DRUM SOON message remain on display?
No
See "Table 7.22.3 ACTION 3."
Yes
Is the MCNT (C76) Board mounted properly?
No
Mount it properly.
Yes
See "Table 7.22.3 ACTION 4".

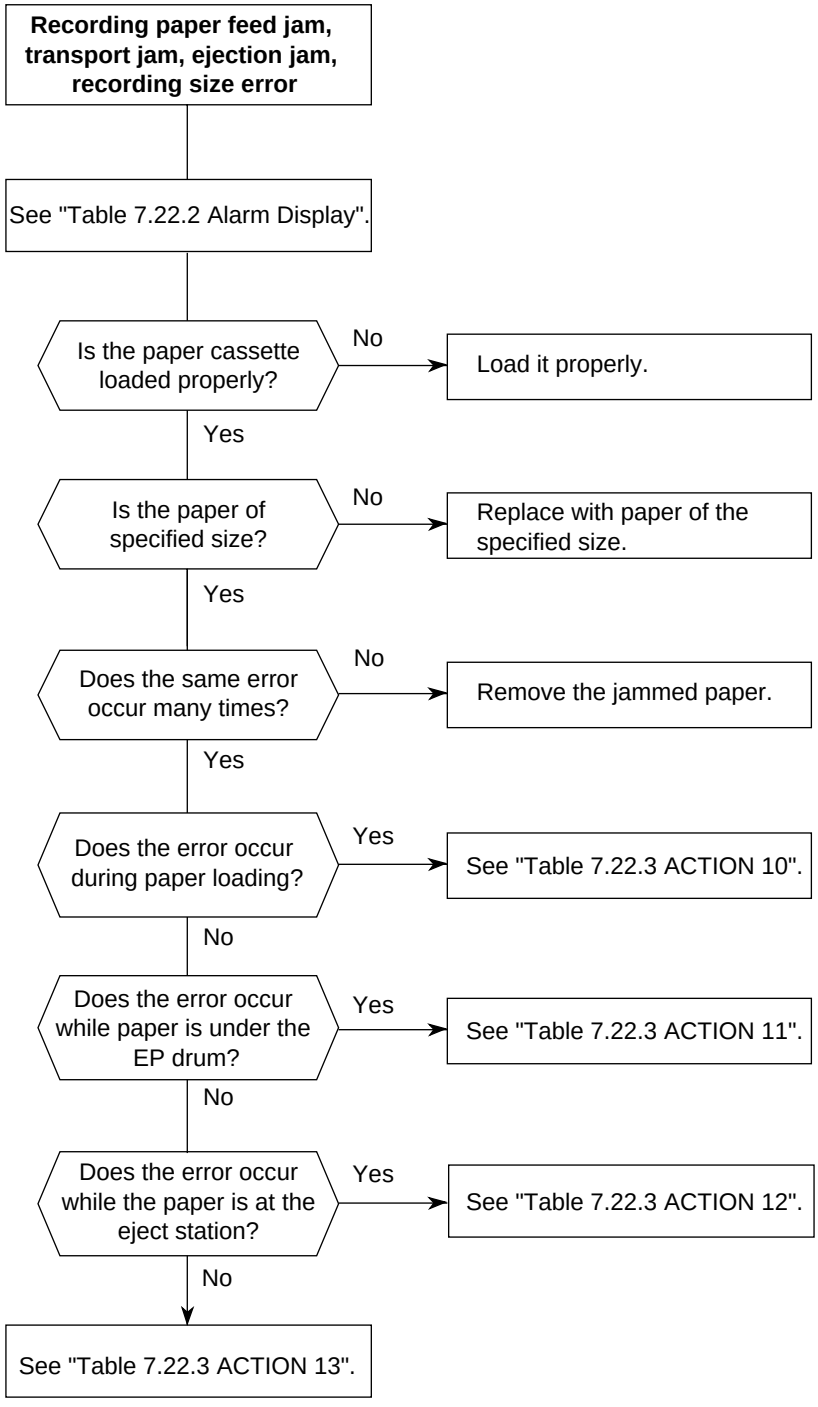
Troubleshooting flow chart 3:



Troubleshooting flow chart 4:



Troubleshooting flow chart 5:


Recording paper feed jam, transport jam, ejection jam, recording size error
See "Table 7.22.2 Alarm Display".
Is the paper cassette loaded properly?
No
Load it properly.
Yes
Is the paper of specified size?
No
Replace with paper of the specified size.
Yes
Does the same error occur many times?
No
Remove the jammed paper.
Yes
Does the error occur during paper loading?
Yes
See "Table 7.22.3 ACTION 10".
No
Does the error occur while paper is under the EP drum?
Yes
See "Table 7.22.3 ACTION 11".
No
Does the error occur while the paper is at the eject station?
Yes
See "Table 7.22.3 ACTION 12".
No
See "Table 7.22.3 ACTION 13".

Troubleshooting flow chart 6:

No recording paper cassette or not recording paper

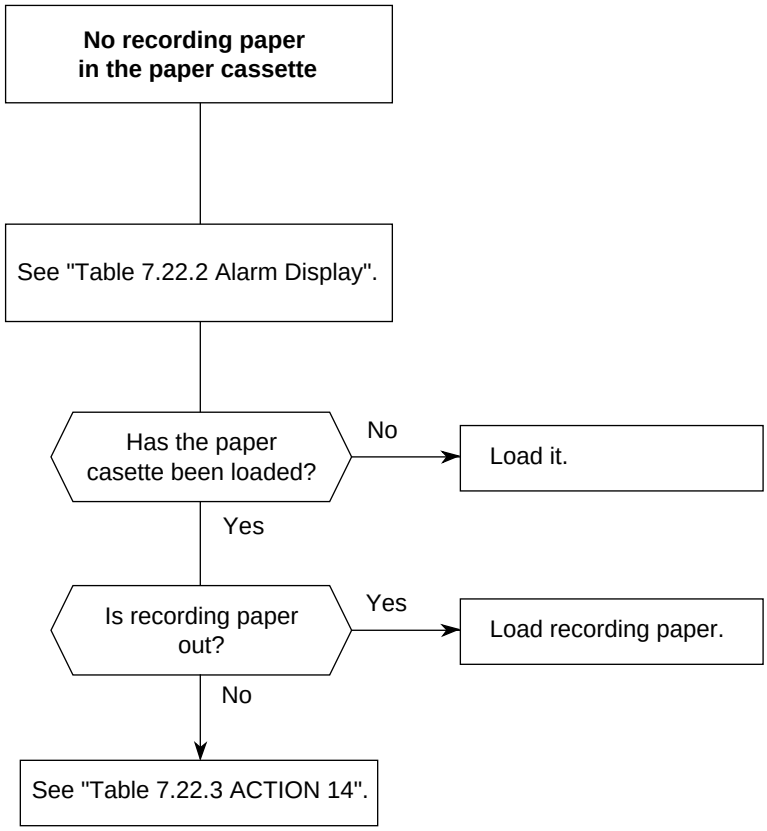


Table 7.22.3 Action Items (Printer Unit-LCD Message)

No.	ACTION
1	Check MCNT (C76) Board.
2	Check H10 Board cover open switch, cover open switch connection. Check MCNT (C76) Board.
3	Return to Section 7.1.
4	Replace the EP Unit. And clear Drum Count, Section 6.3.
5	Check installation of MCNT (C76) board, POWER SUPPLY UNIT board.
6	Check MCNT (C76) Board.
7	Check thermister (resistance of about 200 kilo ohms at room temperature and about 140 kilo ohms at high temperature), POWER SUPPLY UNIT.
8	Check connection between the PWU and the fuser assembly, heater, thermostat.
9	Check PWU.
10	Check Sensor-E, magnet-H, hopping roller, pulse motor, MCNT (C76) Board, Action of Idle gear-P.
11	Check Gear-T, MCNT (C76) Board, P2H/P6L Board.
12	Check exit sensor lever, PWU
13	Check MCNT (C76) Board.
14	Check H10 Board, MCNT (C76) board.

Table 7.22.4 Image Troubles

Abnormal Symptom	Reference Figure	Troubleshooting Flow Chart No.
Images are light or blurred as a whole.	Fig. Ⓐ	7
The blank background is smeared.	Fig. Ⓑ	8
Blank paper is output.	Fig. Ⓒ	9
Black belts or black stripes in vertical direction.	Fig. Ⓓ	10
Periodic abnormal printing.	Fig. Ⓔ	11
Some parts not printed.	——	12
White belts or some white stripes in vertical direction	Fig. Ⓕ	13
Poor fusing (Images are blurred or peeled off when touched by hands)	——	14

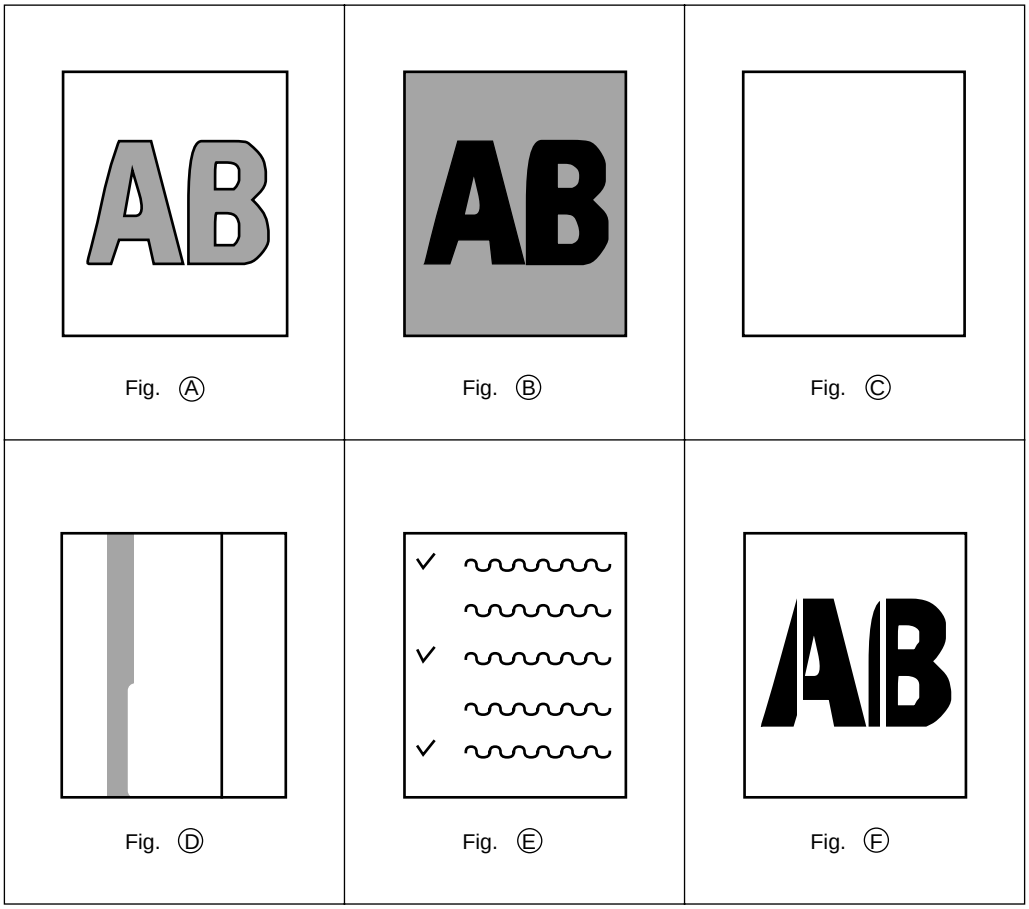
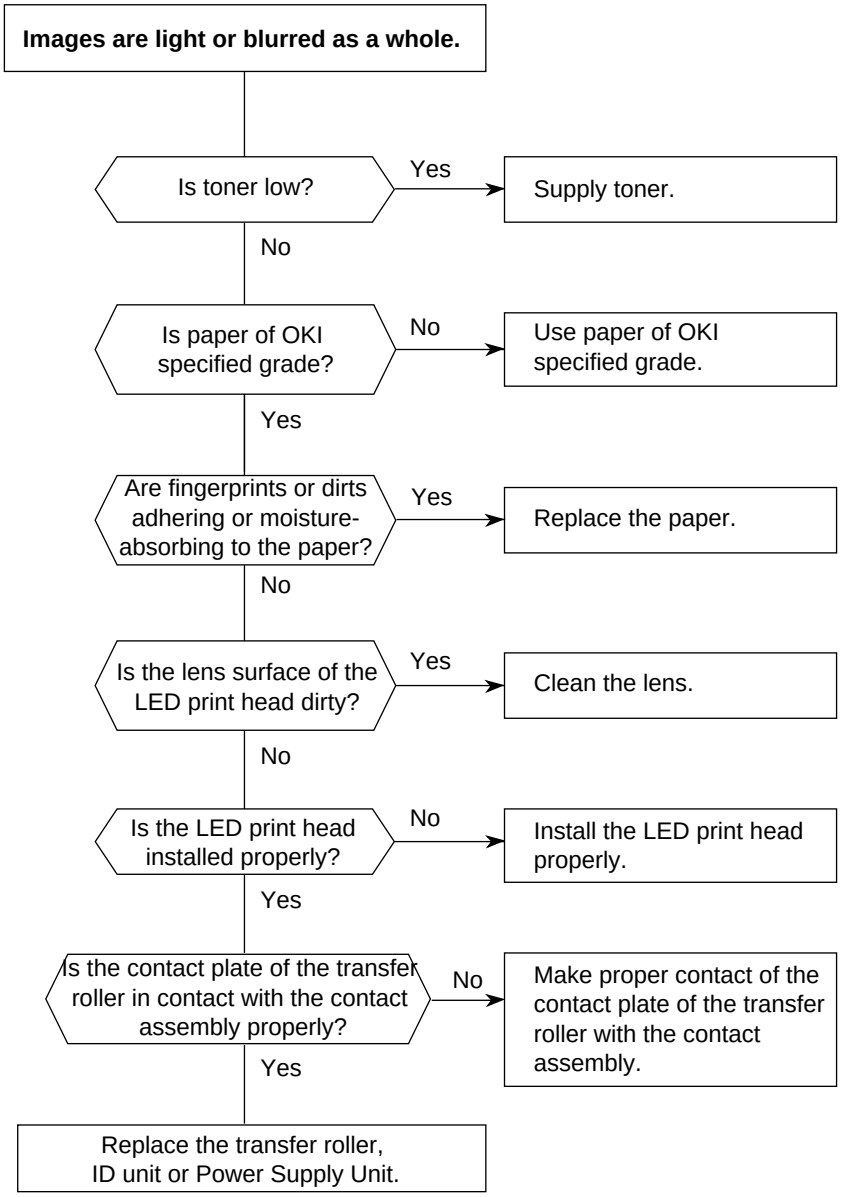
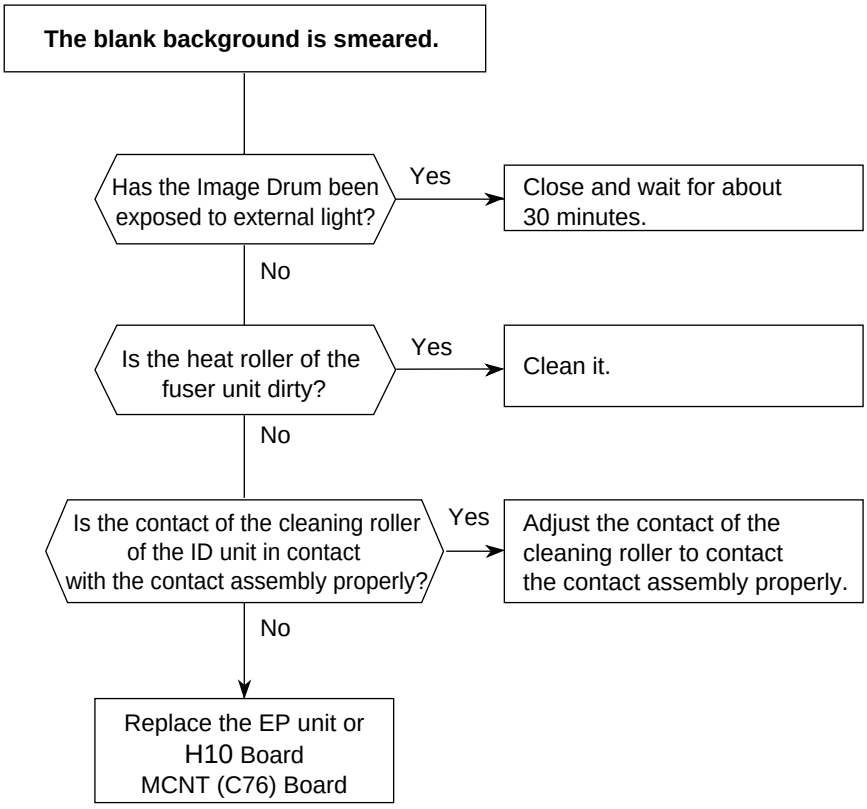


Figure 7.22.1 Abnormal Symptoms of Image Troubles (Example)

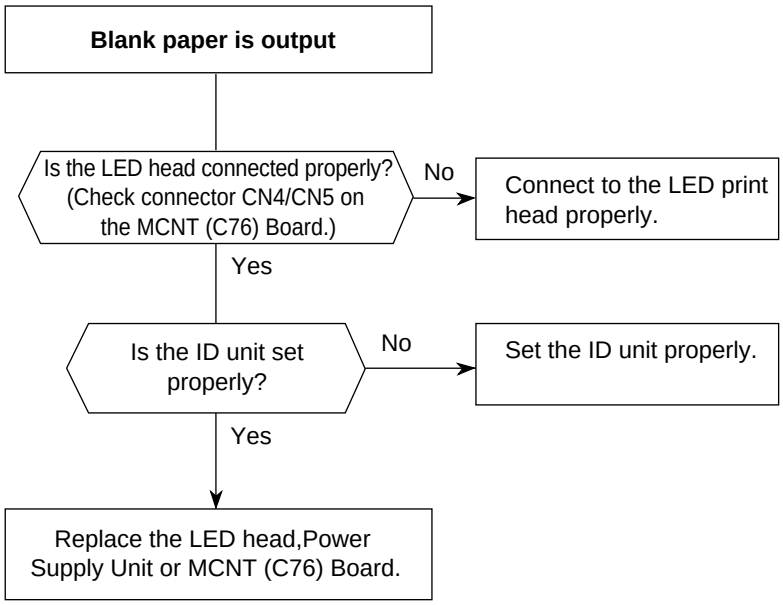
Troubleshooting flow chart 7:


Images are light or blurred as a whole.
Is toner low?
Yes
Supply toner.
No
Is paper of OKI specified grade?
No
Use paper of OKI specified grade.
Yes
Are fingerprints or dirts adhering or moisture-absorbing to the paper?
Yes
Replace the paper.
No
Is the lens surface of the LED print head dirty?
Yes
Clean the lens.
No
Is the LED print head installed properly?
No
Install the LED print head properly.
Yes
Is the contact plate of the transfer roller in contact with the contact assembly properly?
No
Make proper contact of the contact plate of the transfer roller with the contact assembly.
Yes
Replace the transfer roller, ID unit or Power Supply Unit.

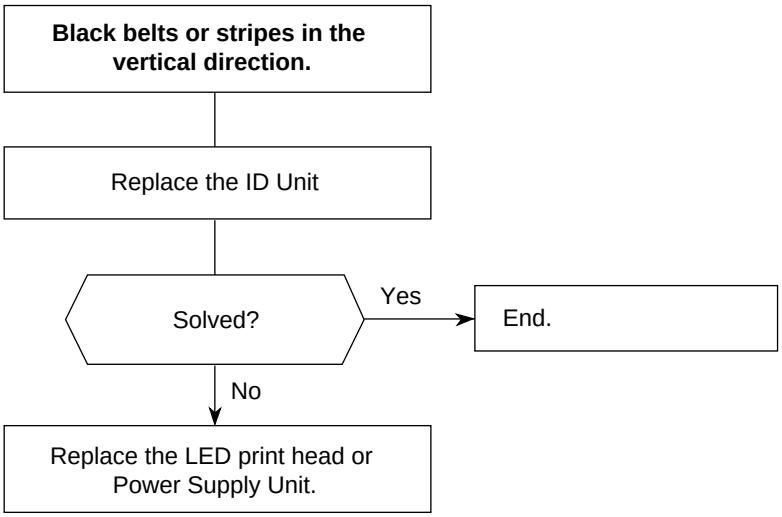
Troubleshooting flow chart 8:


The blank background is smeared.
Has the Image Drum been exposed to external light?
Yes
Close and wait for about 30 minutes.
No
Is the heat roller of the fuser unit dirty?
Yes
Clean it.
No
Is the contact of the cleaning roller of the ID unit in contact with the contact assembly properly?
Yes
Adjust the contact of the cleaning roller to contact the contact assembly properly.
No
Replace the EP unit or H10 Board MCNT (C76) Board

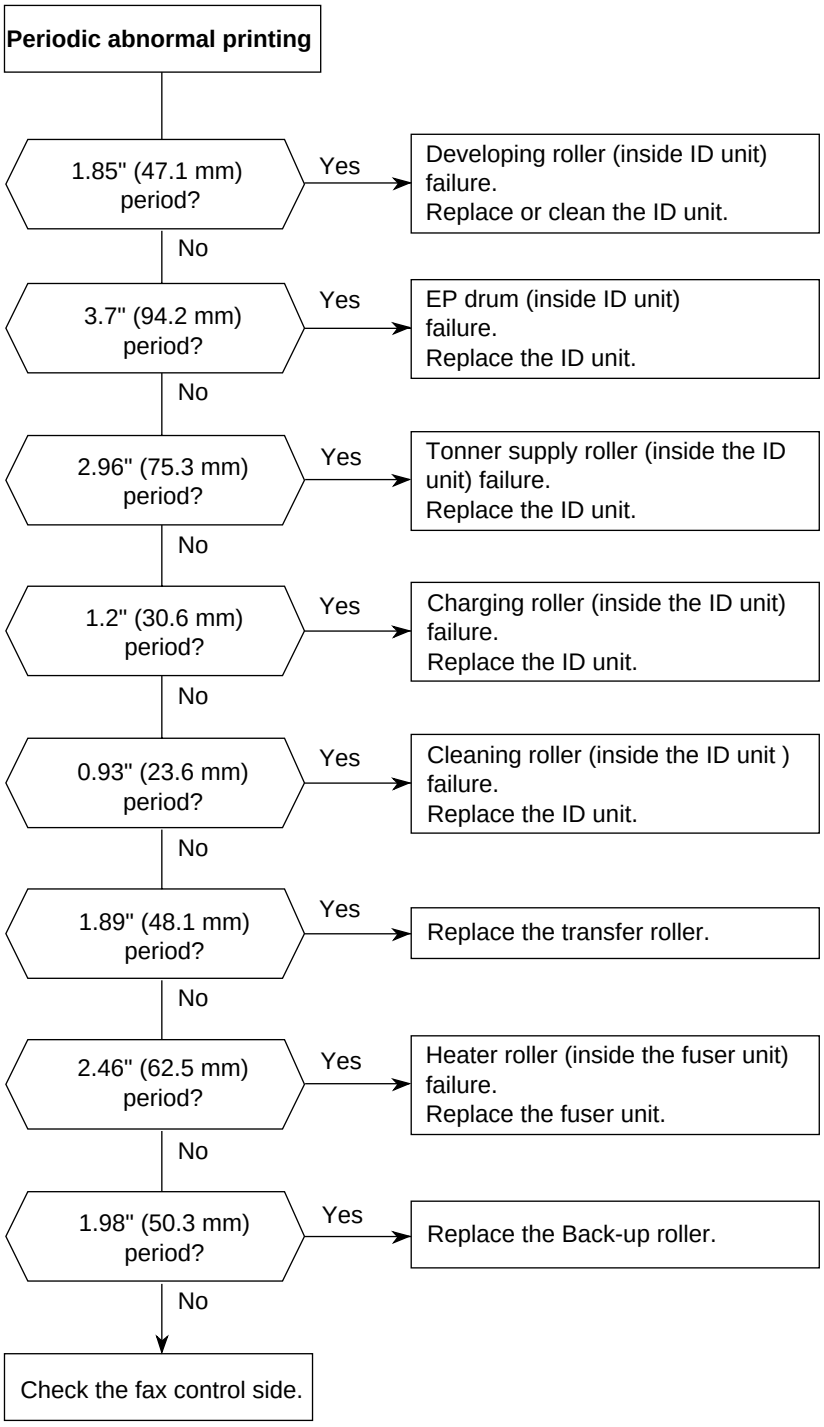
Troubleshooting flow chart 9:


Blank paper is output
Is the LED head connected properly? (Check connector CN4/CN5 on the MCNT (C76) Board.)
No
Connect to the LED print head properly.
Yes
Is the ID unit set properly?
No
Set the ID unit properly.
Yes
Replace the LED head,Power Supply Unit or MCNT (C76) Board.

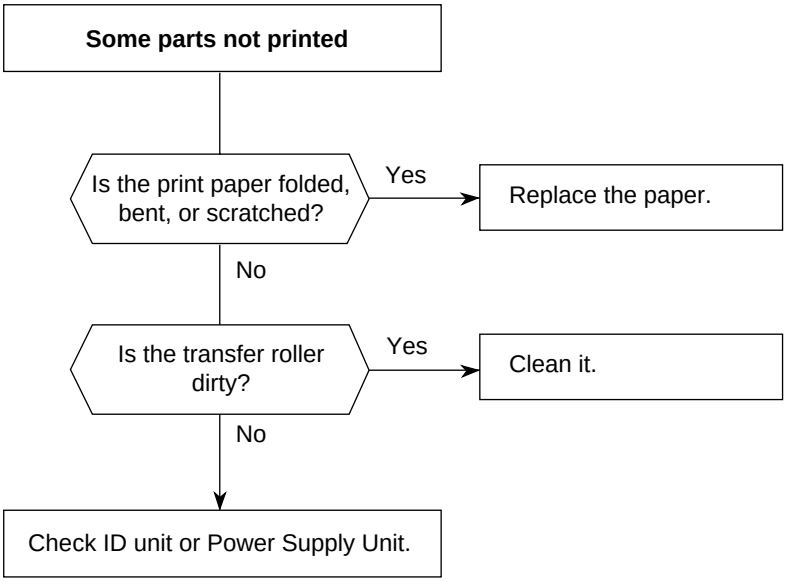
Troubleshooting flow chart 10:



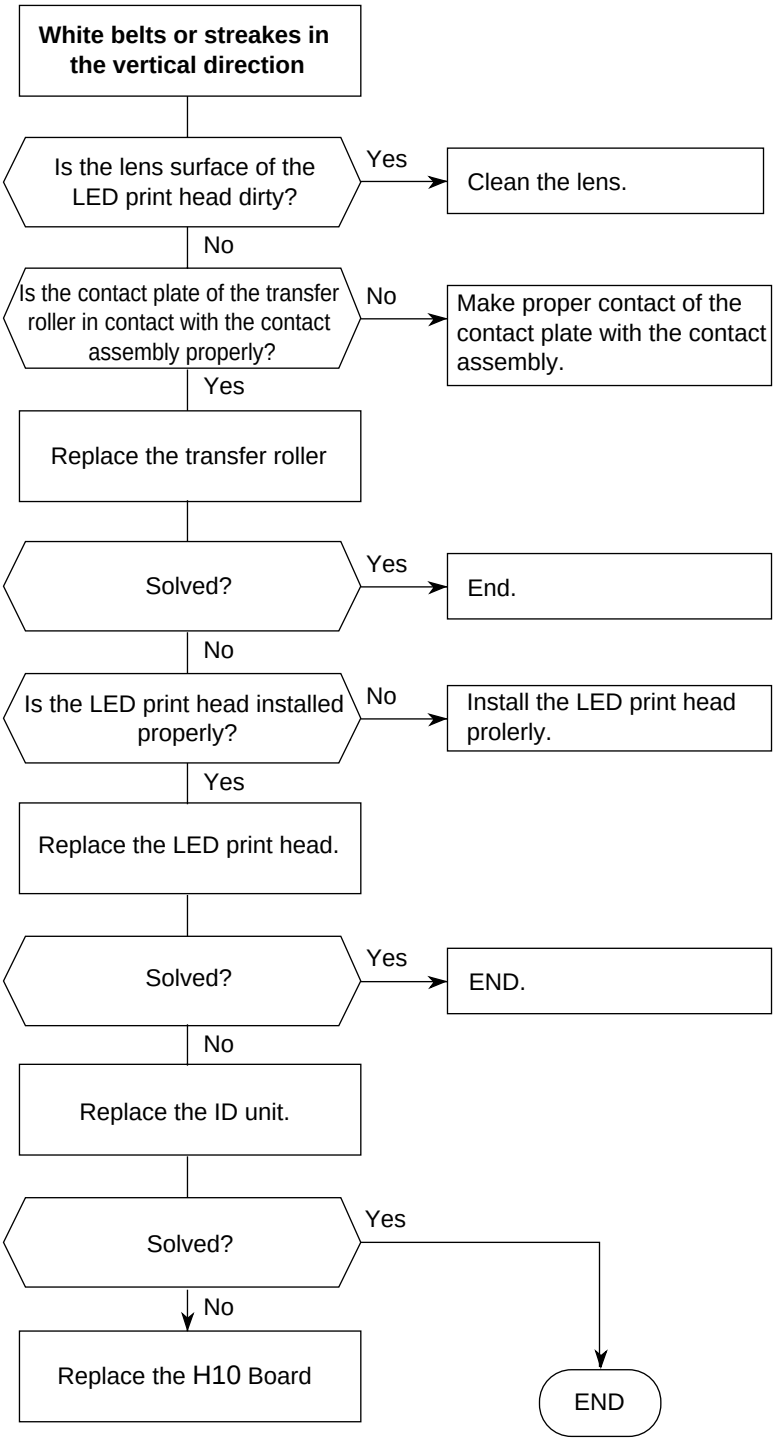
Troubleshooting flow chart 11:



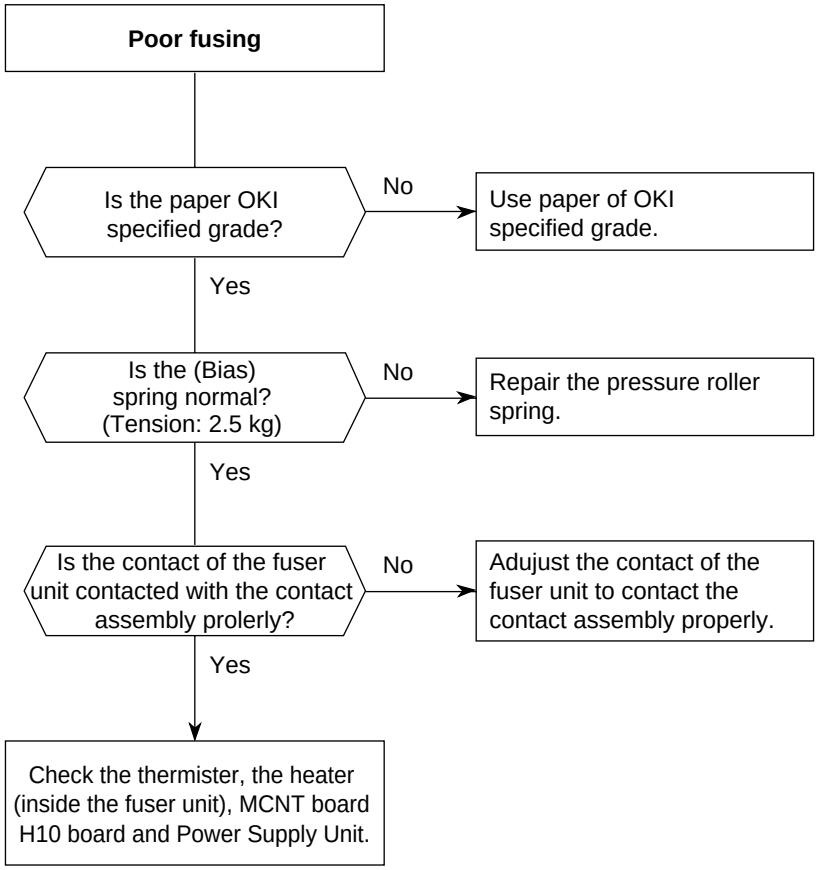
Troubleshooting flow chart 12:



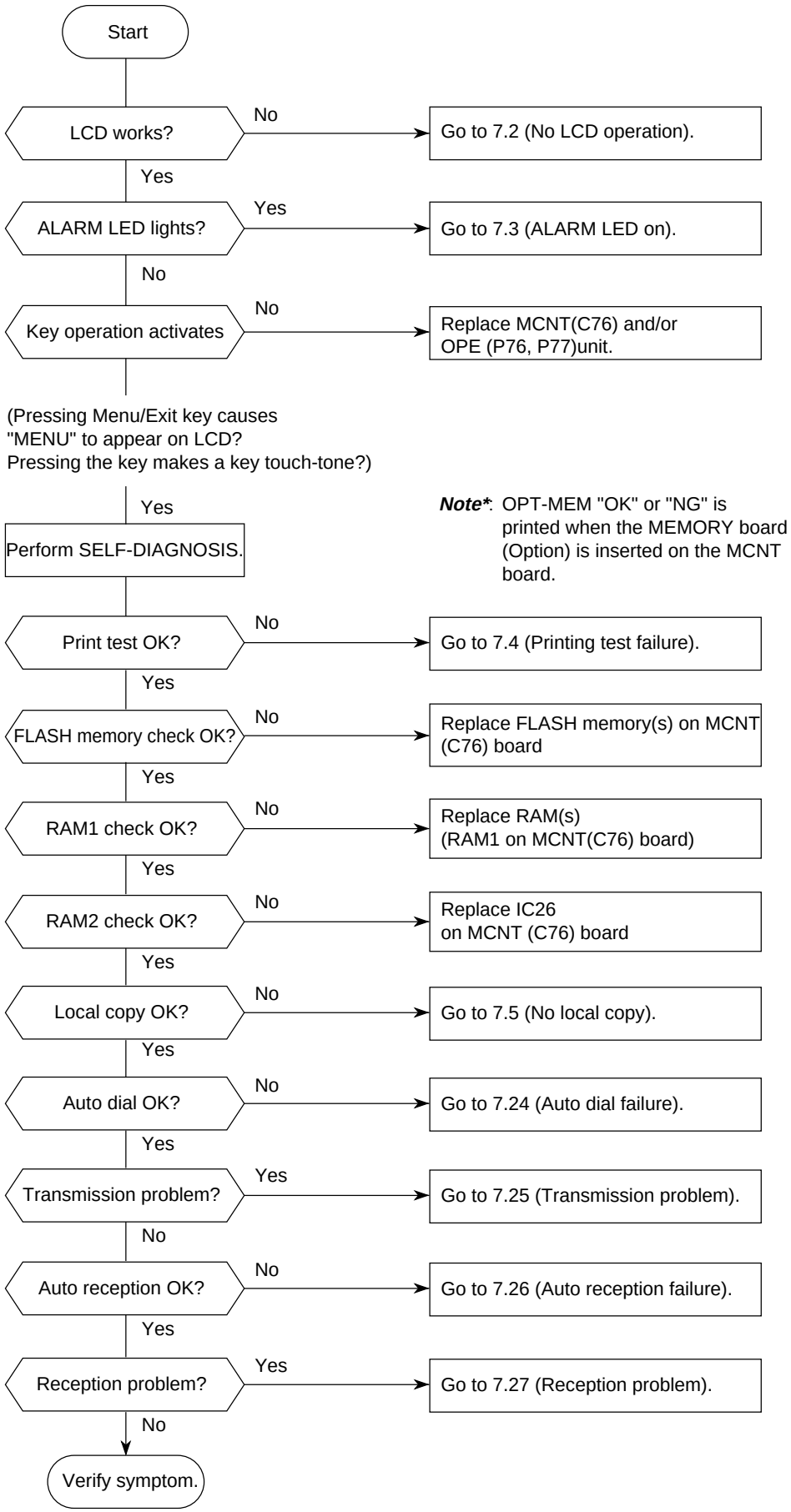
Troubleshooting flow chart 13:



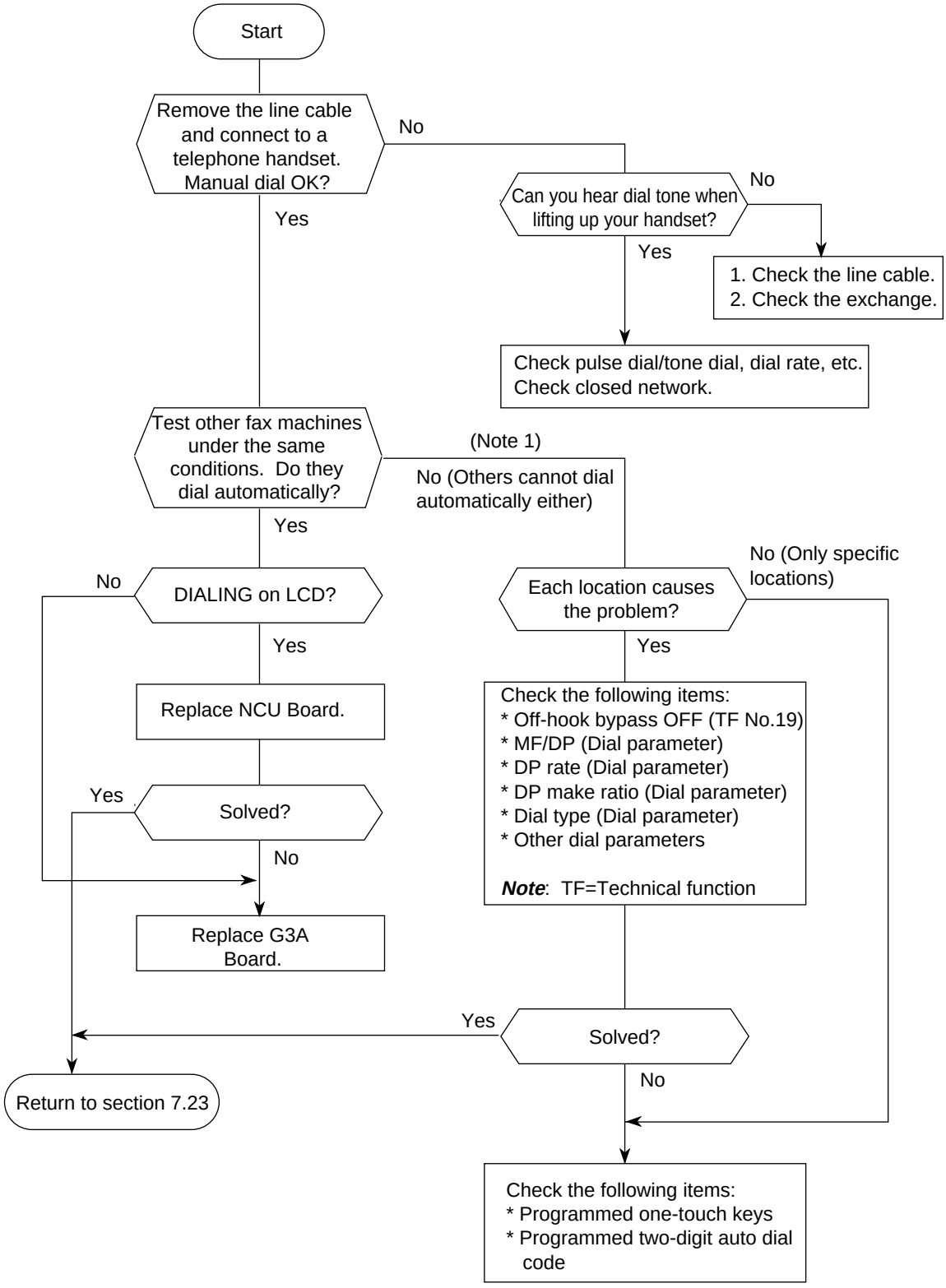
Troubleshooting flow chart 14:


Poor fusing
Is the paper OKI specified grade?
No
Use paper of OKI specified grade.
Yes
Is the (Bias) spring normal? (Tension: 2.5 kg)
No
Repair the pressure roller spring.
Yes
Is the contact of the fuser unit contacted with the contact assembly prolerly?
No
Adujust the contact of the fuser unit to contact the contact assembly properly.
Yes
Check the thermister, the heater (inside the fuser unit), MCNT board H10 board and Power Supply Unit.

7.23 G3 Dual Line Troubleshooting Flow Chart



7.24 Auto Dial Failure (G3 Dual Line)

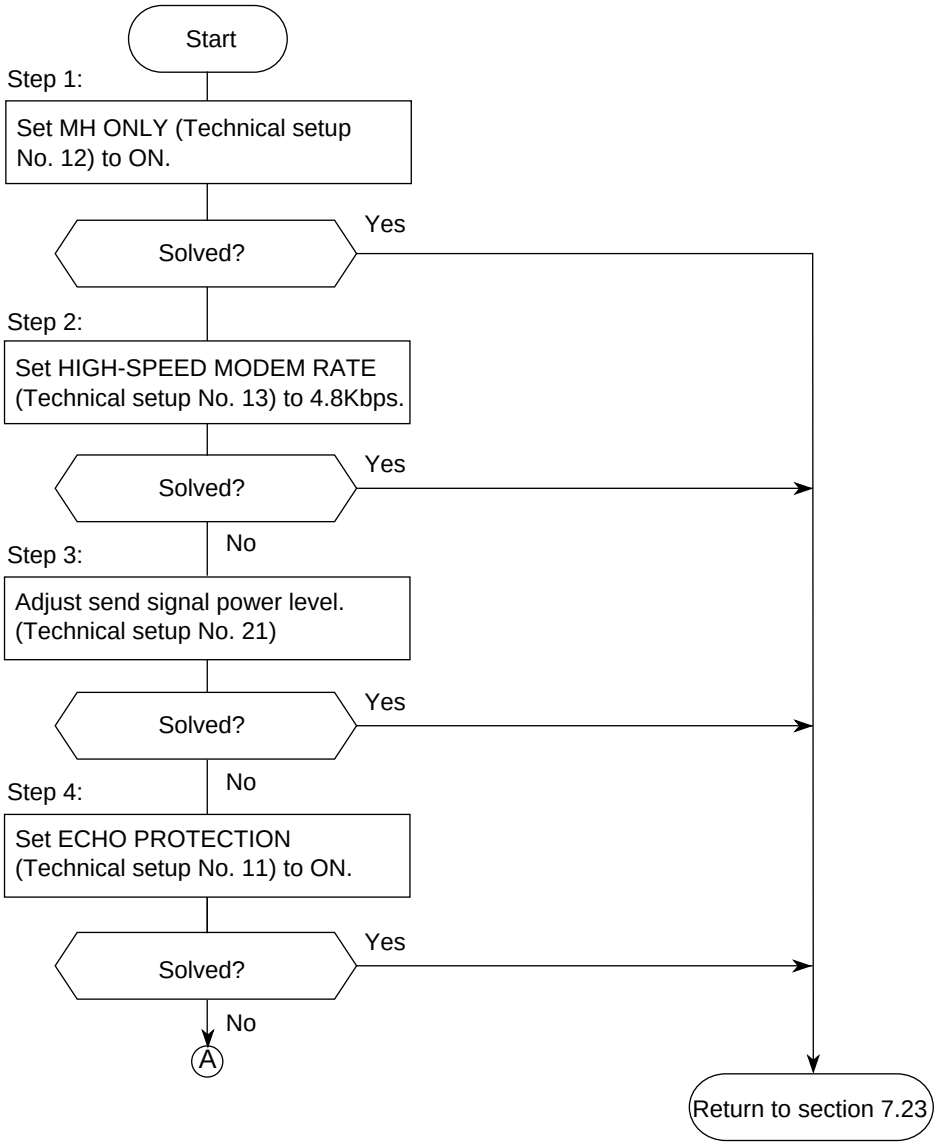


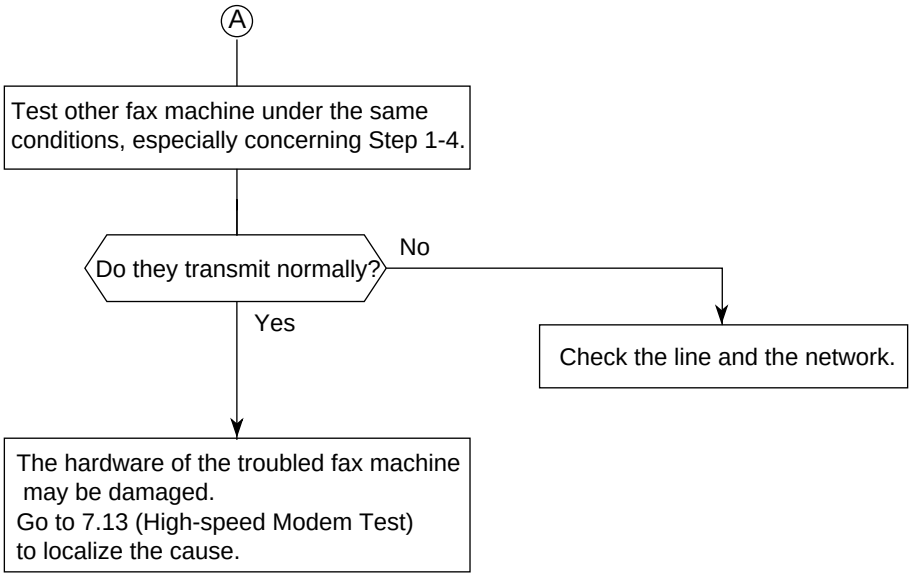
Note 1: If you do not have any other fax machine for testing, follow this route. Then, if the problem is unsolved, return to the main route.

Note 2: NCU Board is shown as UNC for US version, WN5 for INT'L version, TB0 for OEL version.

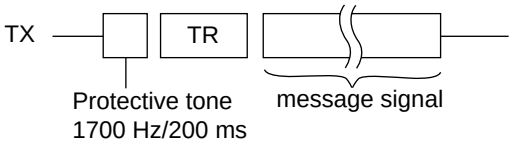
7.25 Transmission Problem (G3 Dual Line)

This section explains how to localize the cause of problems occurred after completion of connection with a remote station.

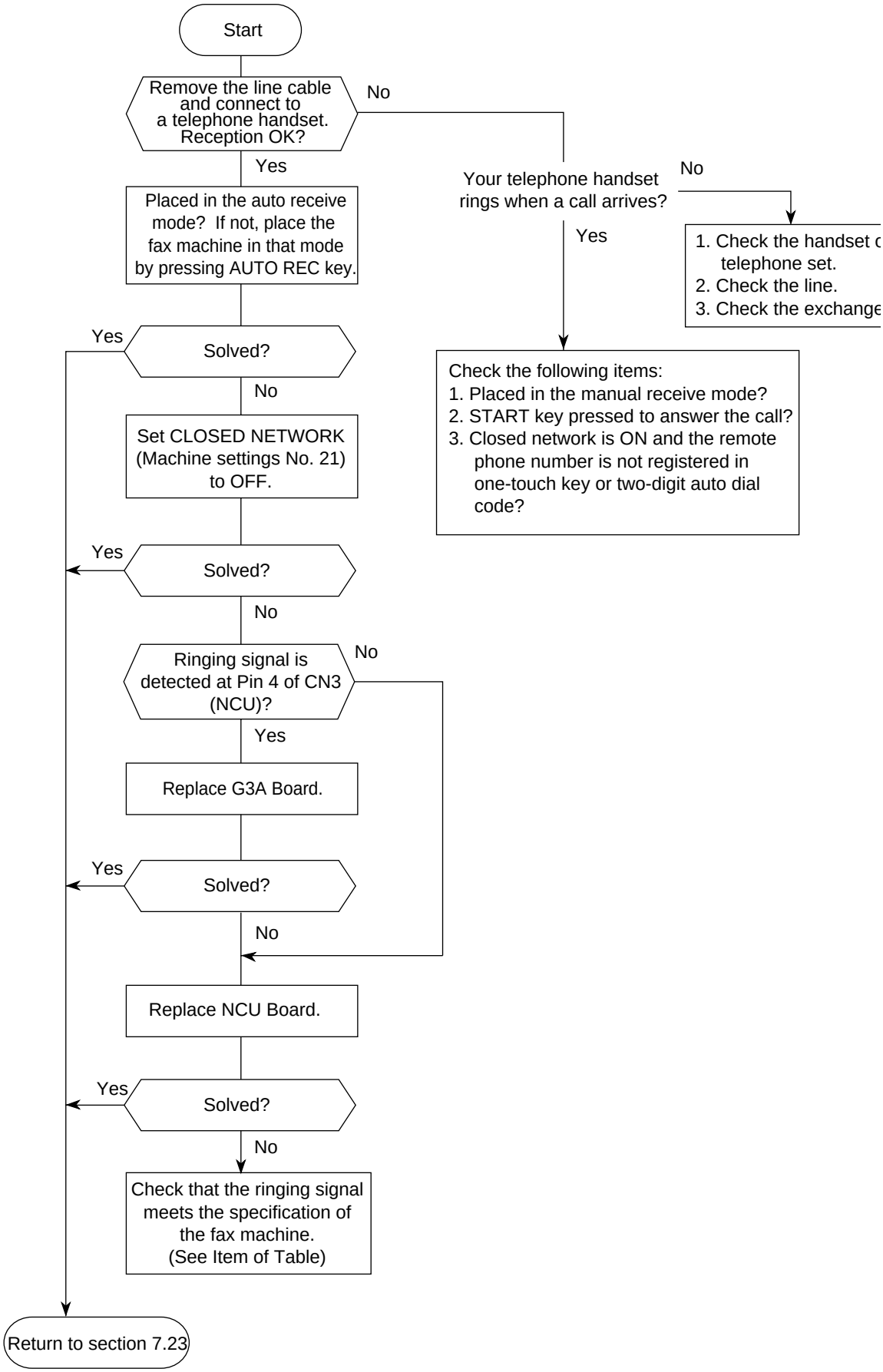



A
Test other fax machine under the same conditions, especially concerning Step 1-4.
Do they transmit normally?
No
Yes
Check the line and the network.
The hardware of the troubled fax machine may be damaged.
Go to 7.13 (High-speed Modem Test) to localize the cause.

Description: Protective tone is 1700 Hz/200 ms.
This signal is added to training signal to protect the training signal against echo as follows.

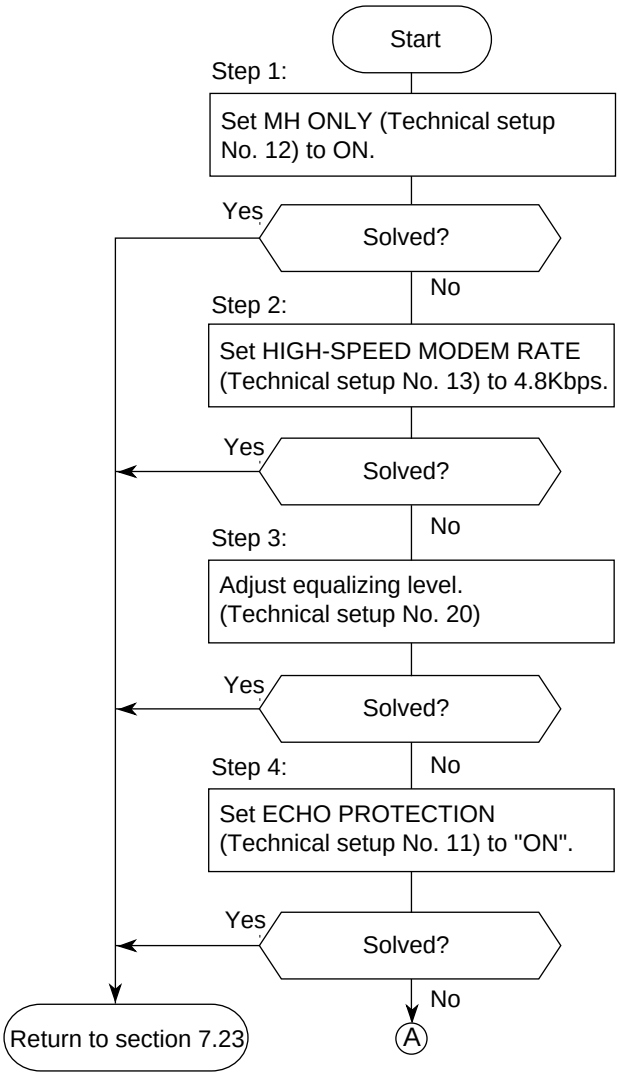


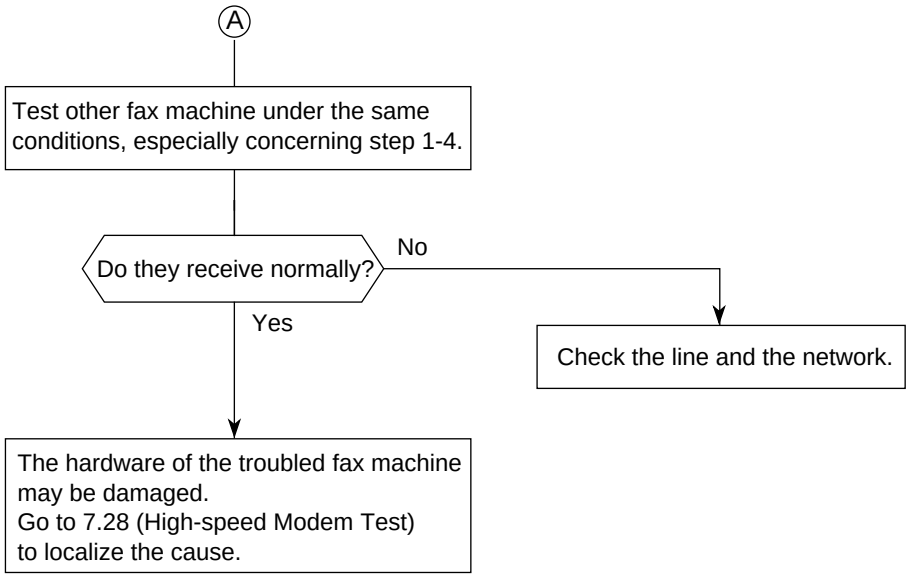
7.26 Auto Reception Failure (G3 Dual Line)


Start
Remove the line cable and connect to a telephone handset. Reception OK?
No
Yes
Your telephone handset rings when a call arrives?
No
Yes
1. Check the handset c telephone set.
2. Check the line.
3. Check the exchange
Placed in the auto receive mode? If not, place the fax machine in that mode by pressing AUTO REC key.
Yes
Solved?
No
Check the following items:
1. Placed in the manual receive mode?
2. START key pressed to answer the call?
3. Closed network is ON and the remote phone number is not registered in one-touch key or two-digit auto dial code?
Set CLOSED NETWORK (Machine settings No. 21) to OFF.
Yes
Solved?
No
Ringing signal is detected at Pin 4 of CN3 (NCU)?
No
Yes
Replace G3A Board.
Yes
Solved?
No
Replace NCU Board.
Yes
Solved?
No
Check that the ringing signal meets the specification of the fax machine. (See Item of Table)
Return to section 7.23

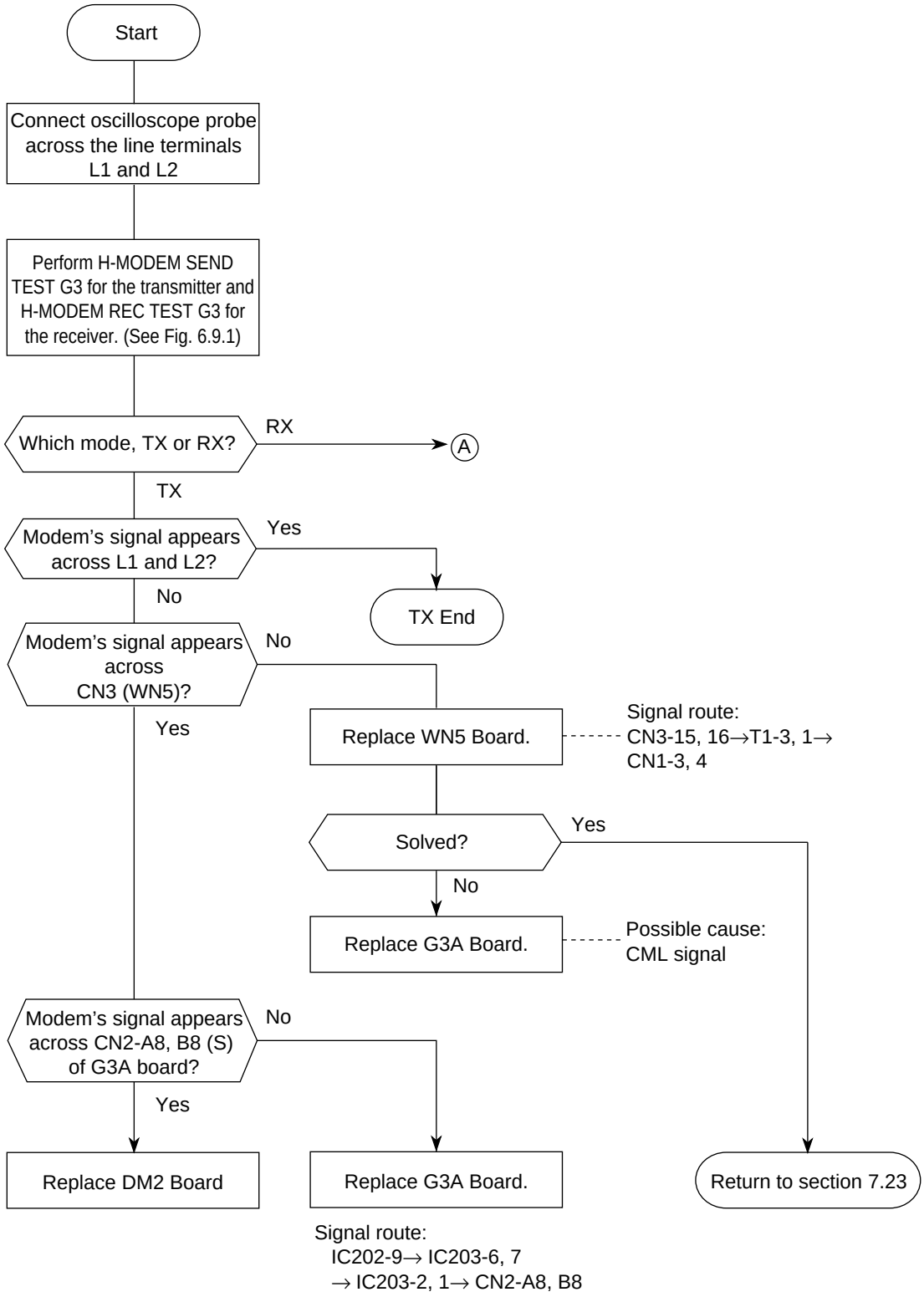
7.27 Reception Problem (G3 Dual Line)

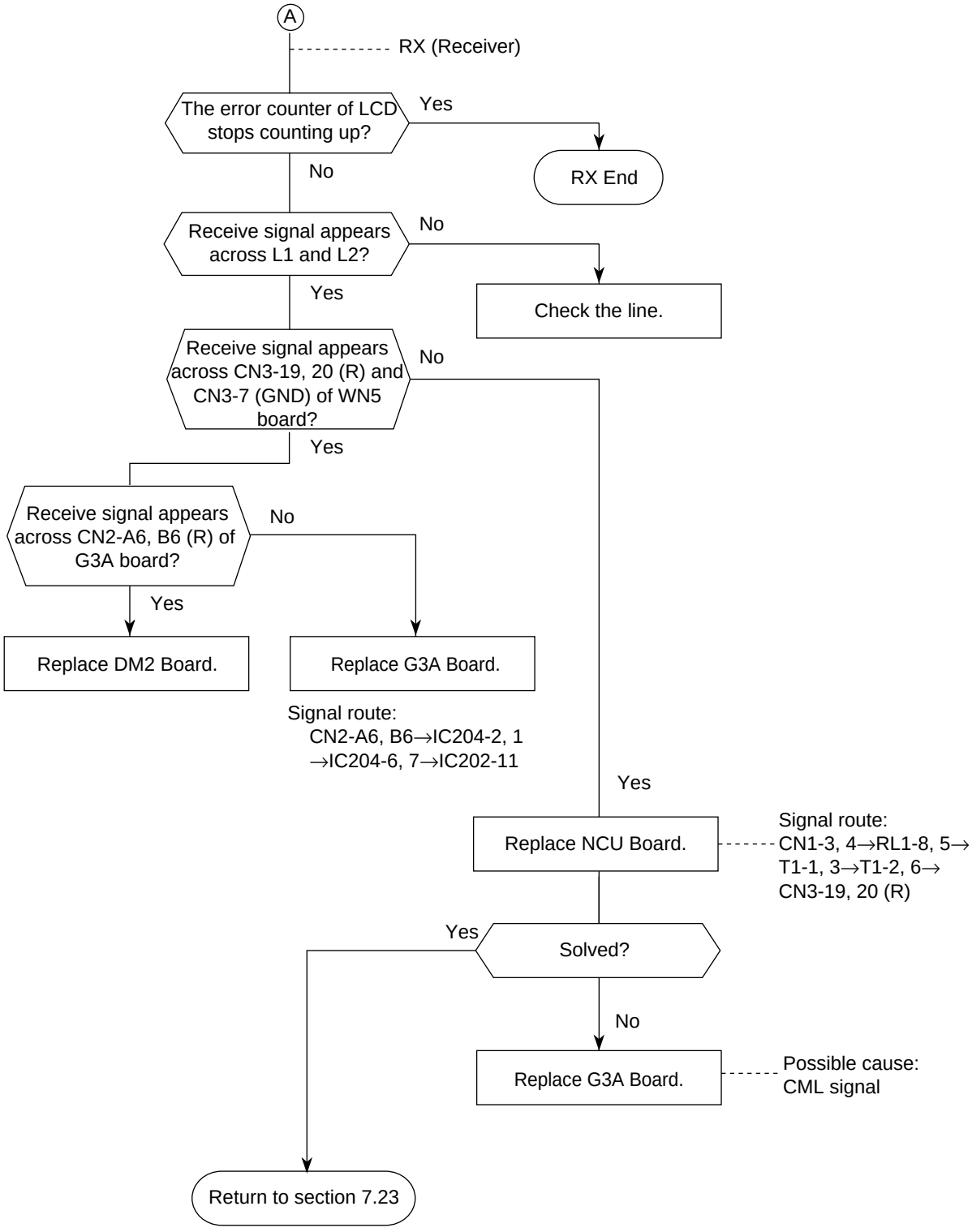
This section explains how to localize the cause of problems occurred after completion of connection with a remote station.



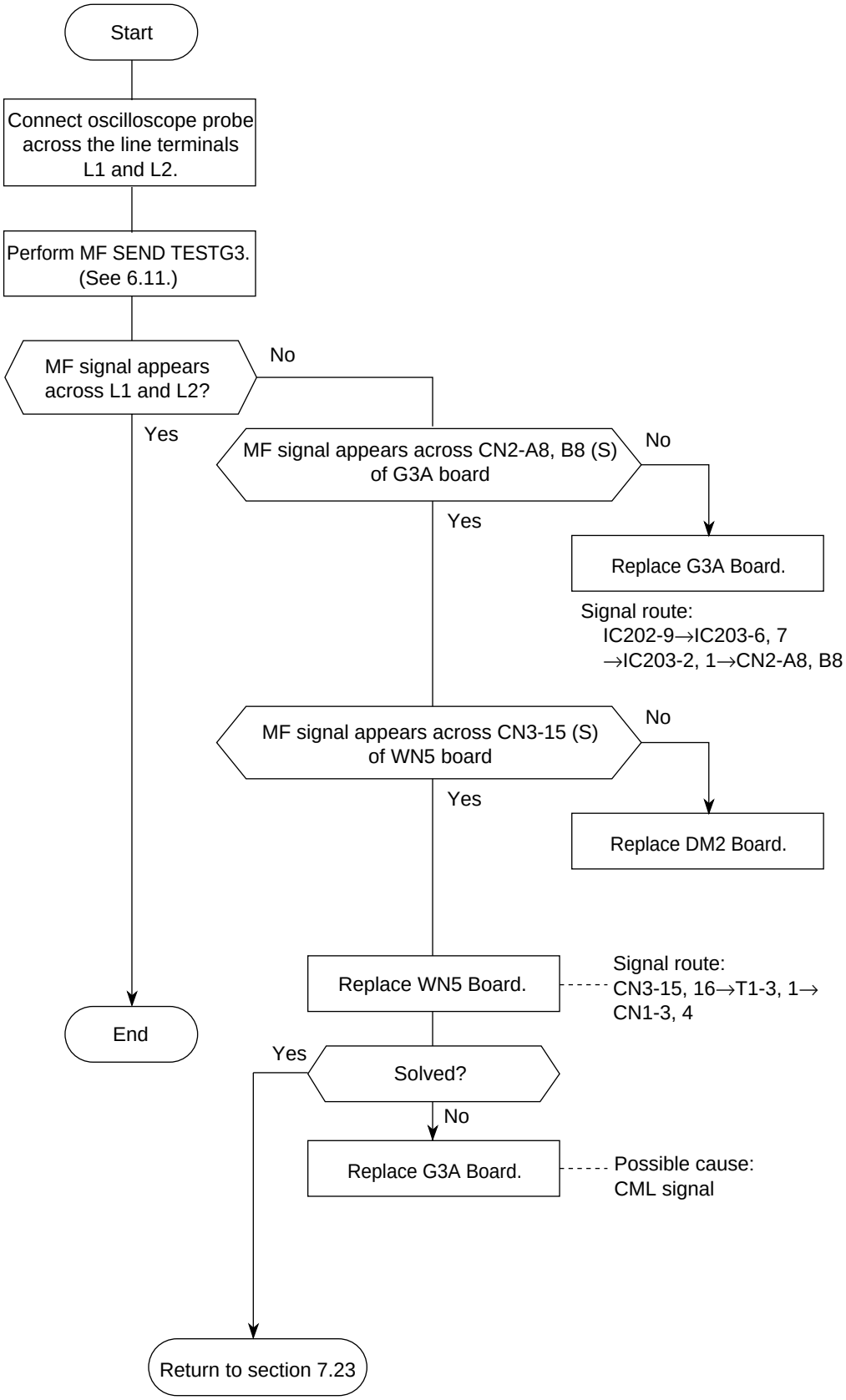

A
Test other fax machine under the same conditions, especially concerning step 1-4.
Do they receive normally?
No
Yes
Check the line and the network.
The hardware of the troubled fax machine may be damaged.
Go to 7.28 (High-speed Modem Test) to localize the cause.

7.28 High-speed Modem Test (G3 Dual Line)



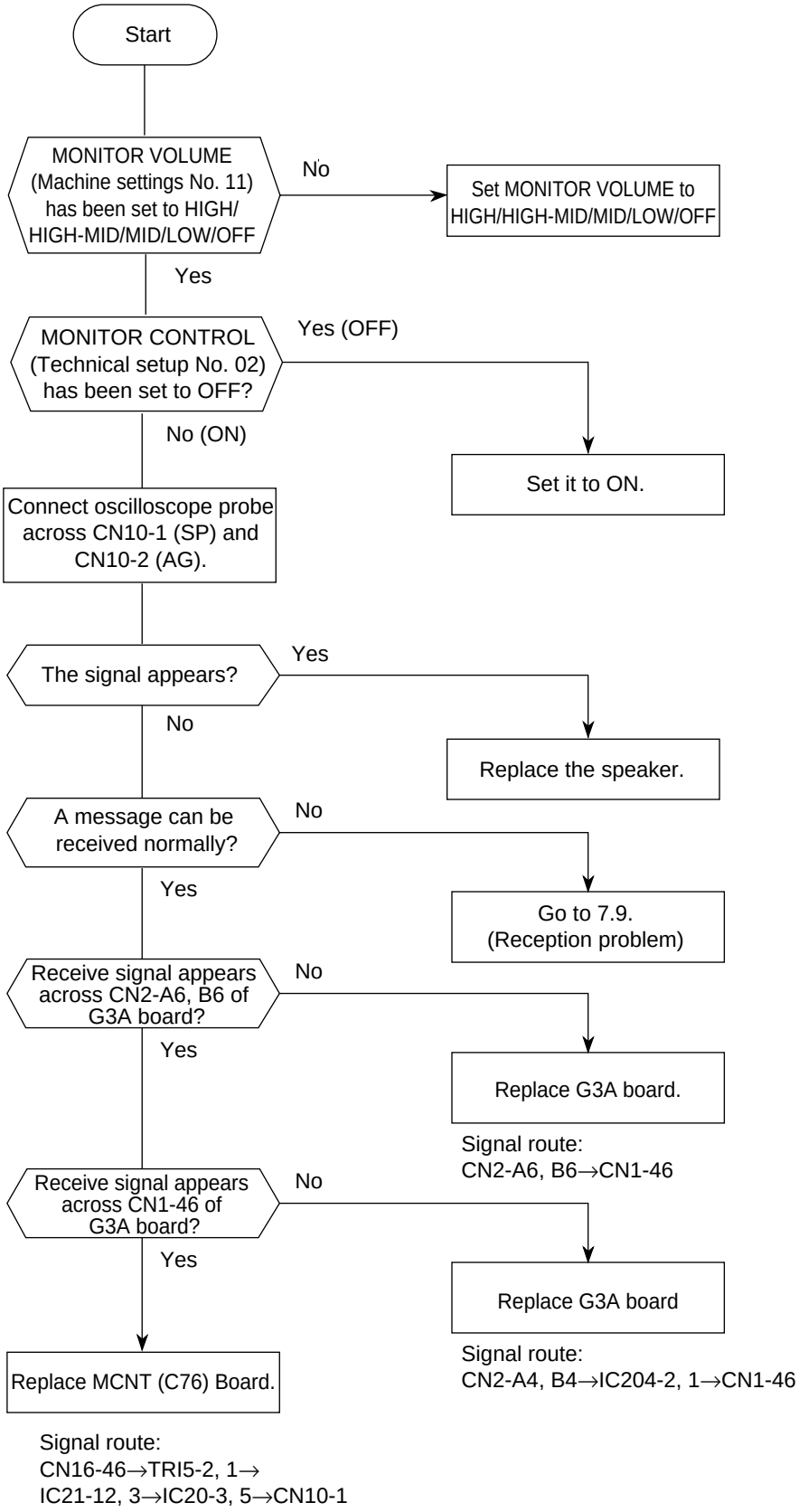

A
RX (Receiver)
The error counter of LCD stops counting up?
Yes
RX End
No
Receive signal appears across L1 and L2?
No
Check the line.
Yes
Receive signal appears across CN3-19, 20 (R) and CN3-7 (GND) of WN5 board?
No
Yes
Receive signal appears across CN2-A6, B6 (R) of G3A board?
No
Yes
Replace DM2 Board.
Replace G3A Board.
Signal route:
CN2-A6, B6→IC204-2, 1
→IC204-6, 7→IC202-11
Yes
Replace NCU Board.
Signal route:
CN1-3, 4→RL1-8, 5→
T1-1, 3→T1-2, 6→
CN3-19, 20 (R)
Yes
Solved?
No
Replace G3A Board.
Possible cause:
CML signal
Return to section 7.23

7.29 MF Send Test (G3 Dual Line)



7.30 No Acoustic Line Monitor (G3 Dual Line)

There are two source routes of acoustic line monitor:
(a) General communication signal
(b) DP pulse signal



8 DIPSWITCHS SETTING TABLES

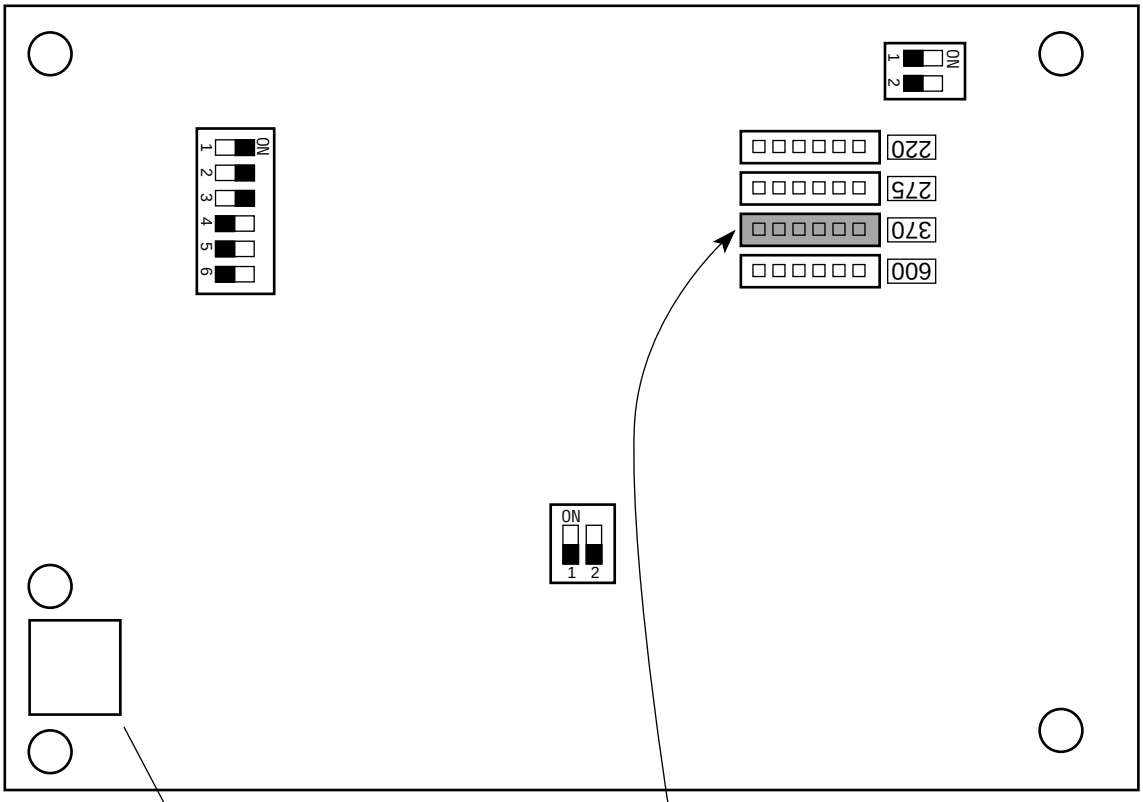
8.1 WN5

Dip-switch No.		New Zealand	Australia	Remarks
S1	1	ON	ON	Cascade connection
	2	ON	ON	
	3	ON	ON	Ring impedance
	4	OFF	OFF	
	5	OFF	OFF	
	6	OFF	OFF	
S3	1	OFF	OFF	DC loop resistance
	2	OFF	ON	
S4	1	OFF	OFF	Ring sensitivity adjustment
	2	OFF	OFF	

1) New Zealand (40044306)

This section gives the following instruction.
- DIP switch setting
- Instructions of marking with red oil ink.
- Put short-plug (40095701) into designated connector.

For detail, see the figure below.



Put short-plug (40095701) into connector indicated "370".

B	N L	IRL	N	D K
S	S F	I	G R	E
P	AUS	N Z	S P	M A
X 1	X 2	X 3	X 4	X 5

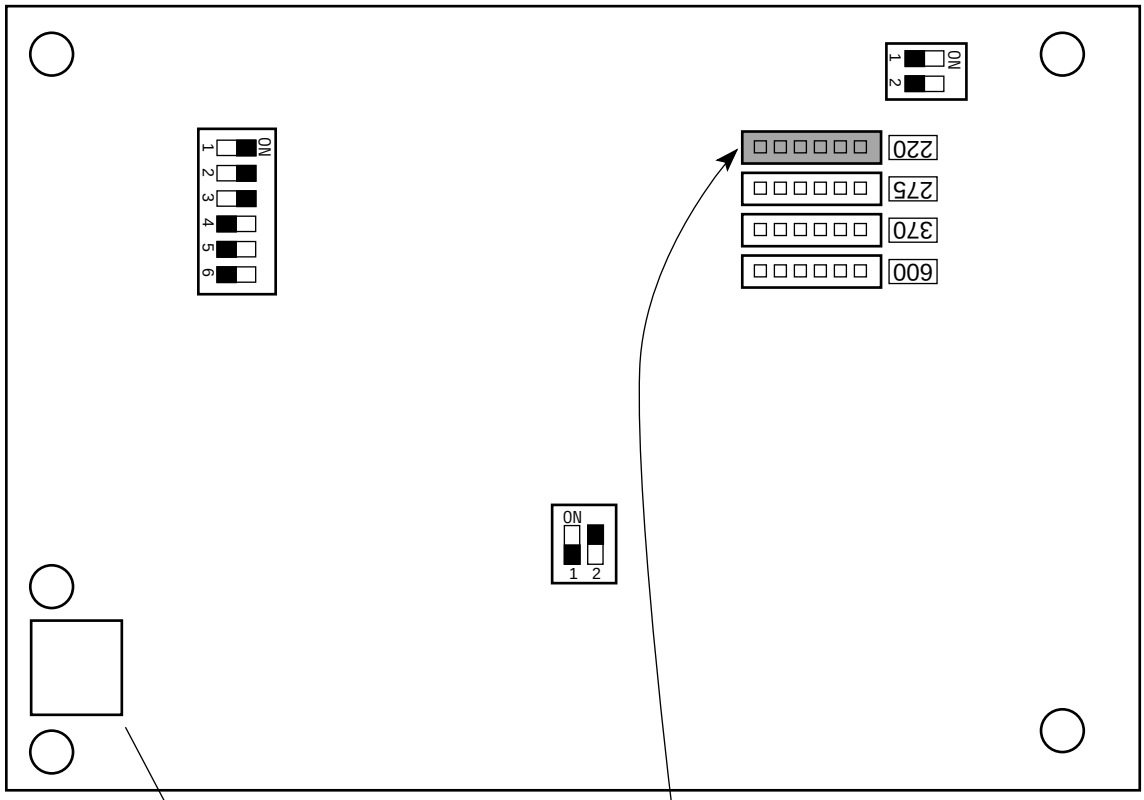
Magnified figure

Marking a portion "NZ" with red oil ink.

2) Australia (40044307)

This section gives the following instruction.
- DIP switch setting
- Instructions of marking with red oil ink.
- Put short-plug (40095701) into designated connector.

For detail, see the figure below.



Put short-plug (40095701) into connector indicated "220".

B	N L	IRL	N	D K
S	S F	I	G R	E
P	AUS	N Z	S P	M A
X 1	X 2	X 3	X 4	X 5

Magnified figure

Marking a portion "AUS" with red oil ink.

8.2 TB0

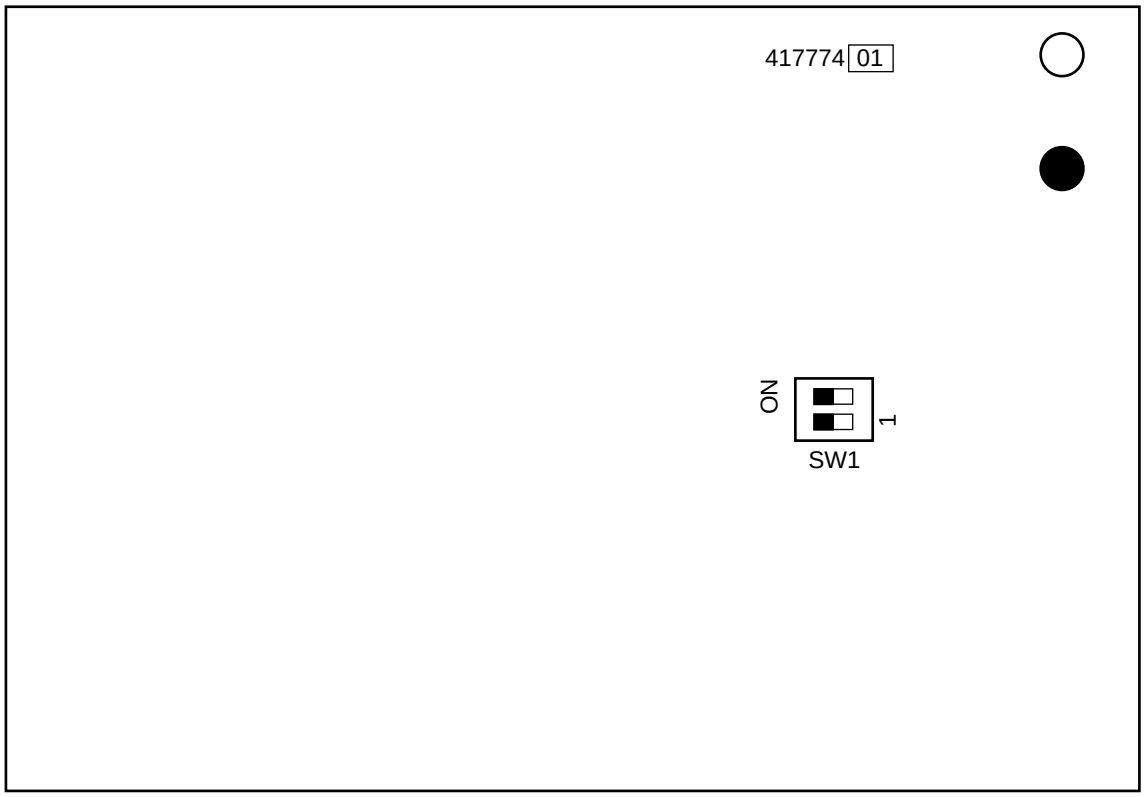
Each country's hardware parameters comparison table.

Dip-switch No.		EC countries (except Germany)	Germany	Remarks
SW1	1	ON	OFF	Shunt wire
	2	ON	ON	Ring detection

1) EC countries (except Germany) (41777401)

This section gives the following instruction.
- DIP switch setting
- Screw tightening position (a black dot)

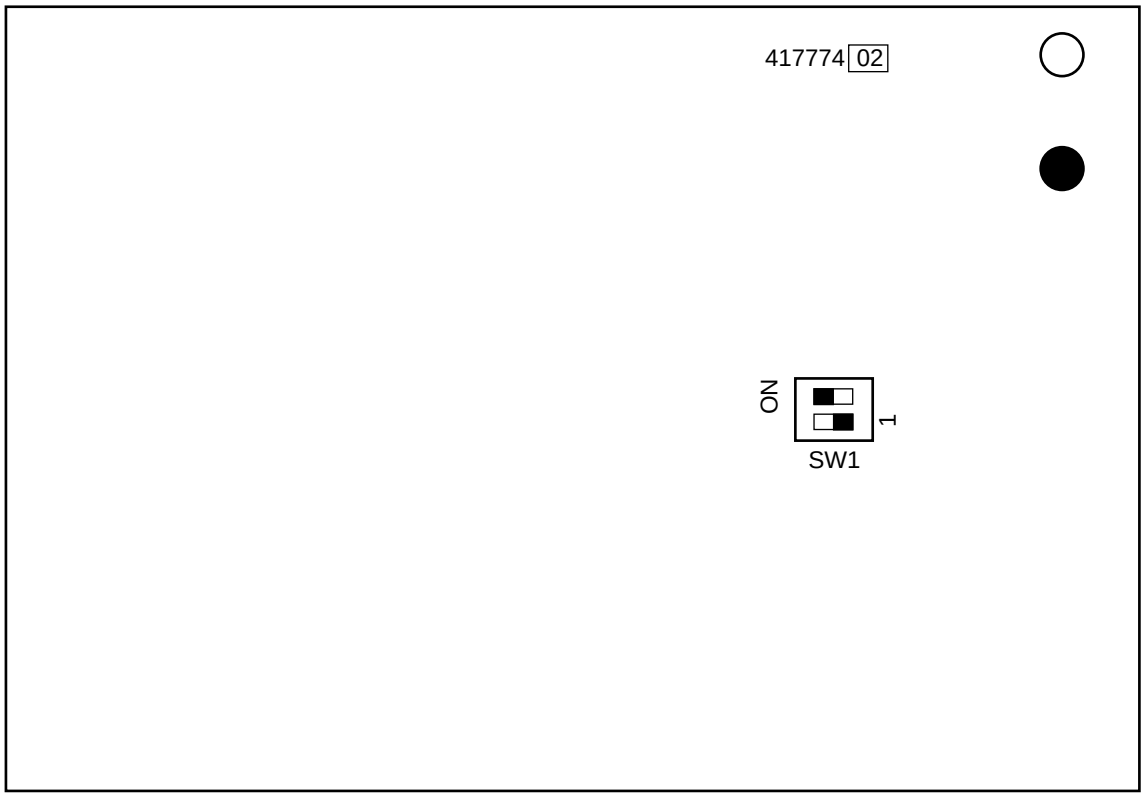
For detail, see the figure below.



2) Germany (41777402)

This section gives the following instruction.
- DIP switch setting
- Screw tightening position (a black dot)

For detail, see the figure below.



Appendix A PC BOARD DESCRIPTIONS AND OPERATION

PREFACE

This manual has been designaed to provide basic information concerning the electric section for the component-level maintenance of the FX-056VP/176VP facsimile transceiver. It includes such information which will help maintenance personnel to understand the circuit operations.

This manual will also provide the reader information concerning the functions of units and the relationships among the units which will assist you in conducting unit-level maintenance.

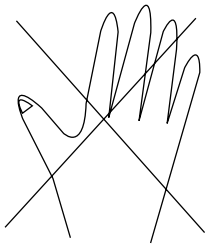
Detailed circuit diagram has been omitted from this manual to avoid duplications of contents with other associated manuals, For information not contained in this manual, refer to:

CIRCUIT DIAGRAM/PARTS LIST (Appendix C)

DANGER

Do Not
Touch !

HIGH VOLTAGE



You may be subjected to high-voltage electric shock by touching the following parts without an insulating material:

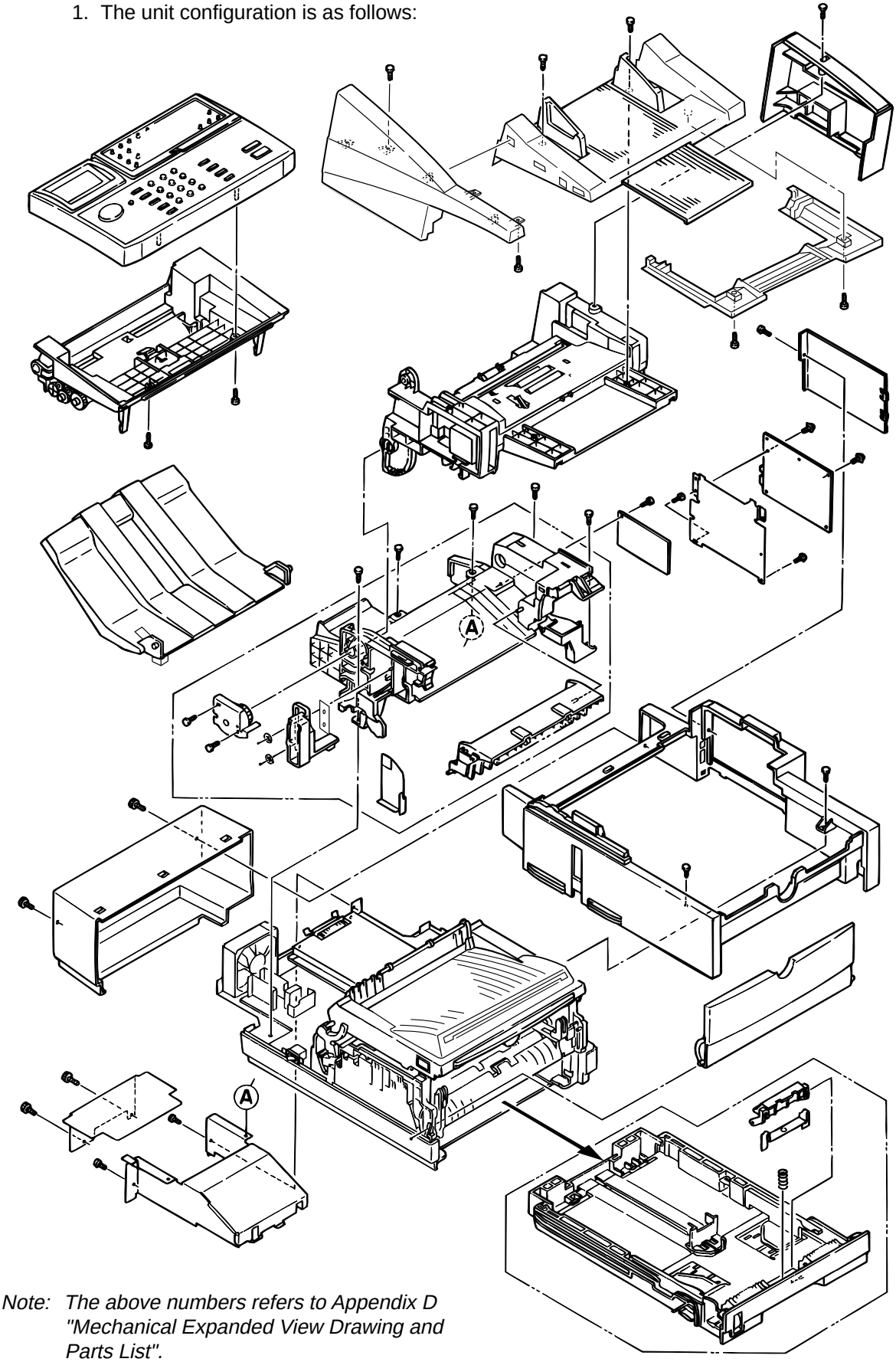
a. High-voltage unit

b. Contact ass'y

© Copyright 1998 OKI DATA CORPORATION
This manual is subject to alteration without prior notification.

A1.1 Unit Configuration and Block Diagram

1. The unit configuration is as follows:



Note: The above numbers refers to Appendix D "Mechanical Expanded View Drawing and Parts List".

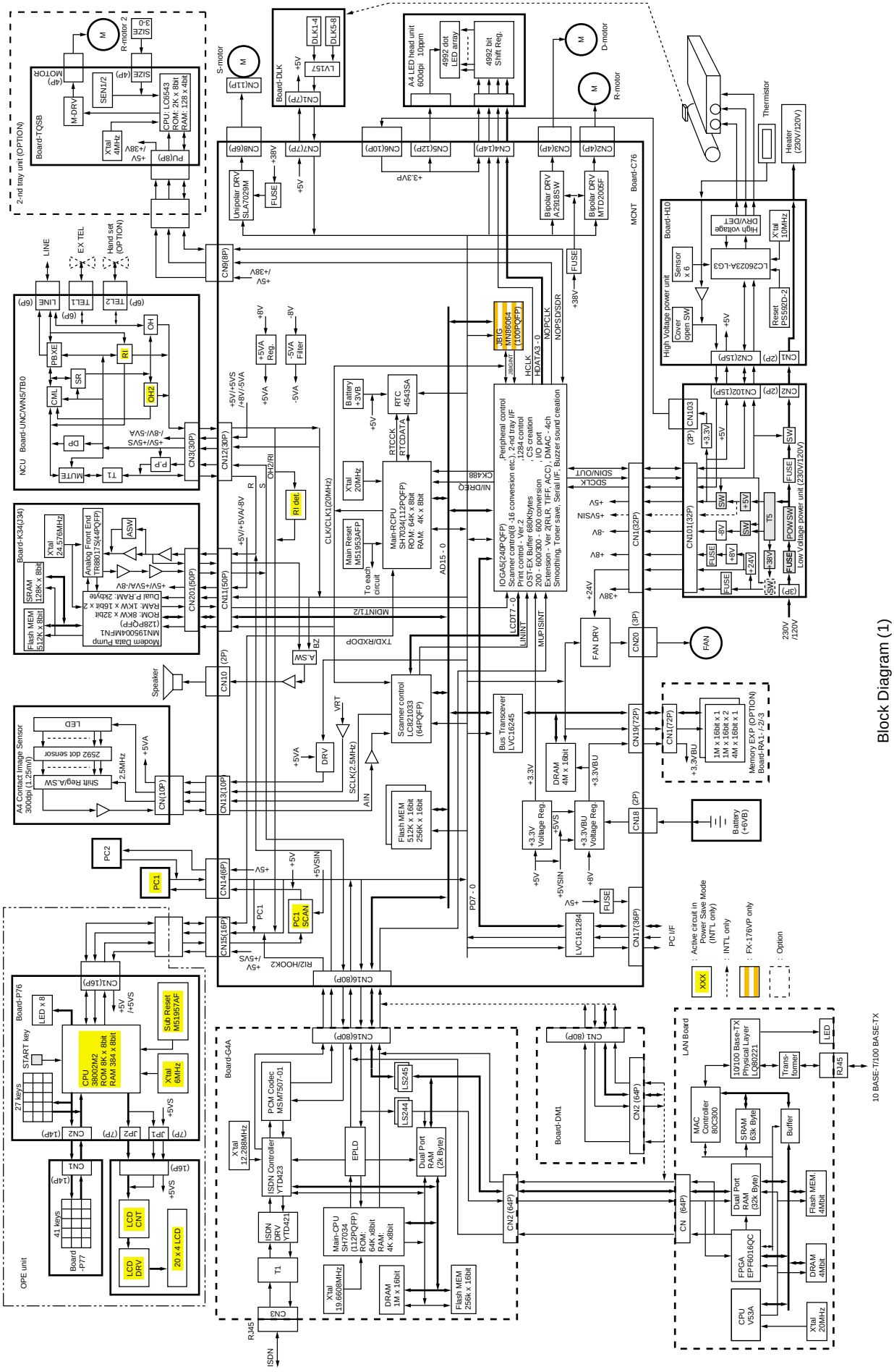
Figure A.1.1 Unit Configuration (Modifying)

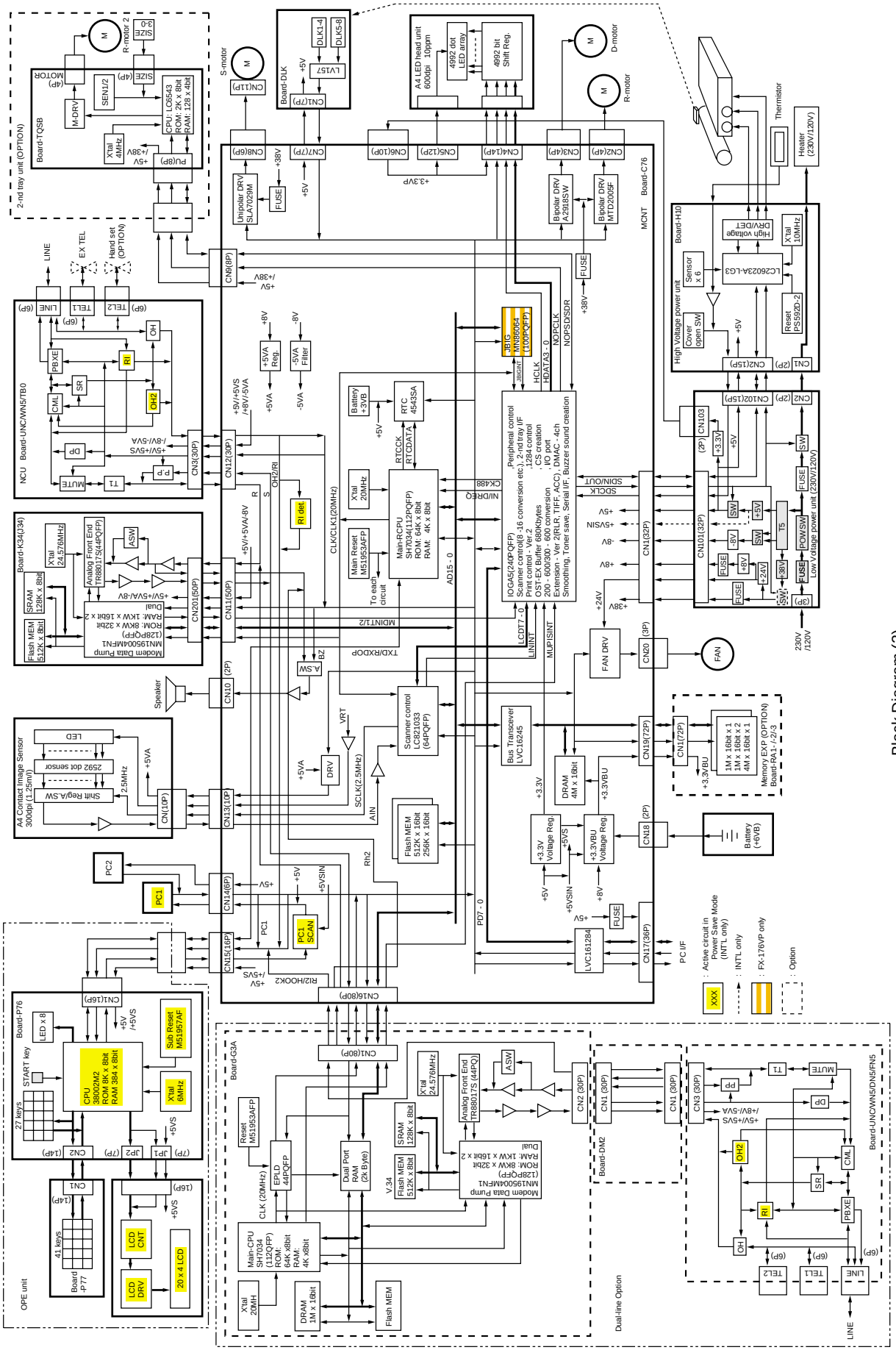
Standard:

(1) MCNT (E76-2 : FX-056VP/E76: FX-176VP)
(2) V.34 Modem (K34-/J34-)
(3) NCU (UNC-/WN5-/TB0)
(4) Operation Panel Board (P76-: Main/P77-: One-touch)
(5) High-voltage Power Unit (H10)
(6) Low-voltage Poewr Unit (MPW2520: 120V/MPW2420: 230V)
(7) IDU/Toner Lock Board (DLK-)

Option:

(8) Optional Memory (RA1-: 2M byte/RA1-2: 4M byte/RA1-3: 8M byte)
(9) G4 Board (G4A-2)
(10) Adaptor Board for NIC (DM1-)
(11) NIC (Network Interface Card)
(12) G3 Dual Line Board (G3A-)
(13) Adapter Board for G3A (DM2-)


Block Diagram (1)
MCNT Board-C76
NCU Board-UNC/WN5/TB0
Board-K34(134)
Board-P76
Board-G4A
Board-DM1
Board-P77
Board-DLK
Board-TQSB
Board-H10
2-nd tray unit (OPTION)
OPE unit
LAN Board
Memory EXP (OPTION) Board-PA1 - 2/3
Low Voltage power unit (230V/120V)
High Voltage power unit
A4 Contact Image Sensor 300dpi (1.25m/l)
A4 LED head unit 600dpi 10ppm
Main-RCPU SH7034(112PQFP) ROM: 64K x 8bit RAM: 4K x 8bit
Scanner control LC821033 (64PQFP)
Modem Data Pump MN19500AMFN1 (128PQFP)
Analog Front End TR88017(44PQFP)
Main Reset M51953AFP
RTC 4543SA
Bus Transceiver LVC16245
FAN DRV
FAN
Speaker
Battery (+6VB)
Thermistor
Heater (230V/120V)
S-motor
D-motor
R-motor
R-motor 2
Active circuit in Power Save Mode (INT'L only)
INT'L only
FX-176VP only
Option
10 BASE-T/100 BASE-TX
ISDN


Block Diagram (2)
NCU Board-UNC/WN5/TB0
MCNT Board-C76
Board-K34(134)
Board-P76
Board-G3A
Board-DM2
Board-UNC/WN5/DN5/FN5
Board-H10
Board-DUK
Board-TQSB
2-nd tray unit (OPTION)
A4 Contact Image Sensor 300dpi (1.25mm)
A4 LED head unit 600dpi 10ppm
4992 dot LED array
4992 bit Shift Reg.
S-motor
R-motor 2
D-motor
R-motor
Thermistor
Heater (230V/120V)
Speaker
Battery (+6VB)
FAN
FAN DRV
Main-RCPU SH7034(112PQFP) ROM: 64K x 8bit RAM: 4K x 8bit
Main Reset M51953AFP
Scanner control LC821033 (64PQFP)
Bus Transceiver LVC16245
LVC161284
Modem Data Pump MN19500AMFN1 (128PQFP) ROM: 8KW x 32bit RAM: 1KW x 16bit x 2 Dual
Analog Front End TR88017S(44PQFP)
Dual Port RAM (2k Byte)
EPLD 44PQFP
Flash MEM 512K x 16bit
SRAM 128K x 8bit
DRAM 4M x 16bit
DRAM 1M x 16bit
Main-CPU SH7034 (112QFP) ROM: 64K x8bit RAM: 4K x8bit
CPU 38002M2 ROM 8K x 8bit RAM 384 x 8bit
Sub Reset M51957AF
Reset M51953AFP
Unipolar DRV SLA7029M
Bipolar DRV A3918SW
Bipolar DRV MTD2005F
Low voltage power unit (230V/120V)
High Voltage power unit
Memory EXP (OPTION) Board-RA1 - /2/3
Dual-line Option
OPE unit
Active circuit in Power Save Mode (INT'L only)
INT'L only
FX-176VP only
Option
PC I/F

A2.1 OKIFAX 5750/5950 Signal Flow

Each signal flow is shown as below:

1. COPY
2. G3 TX (MH/MR/MMR)

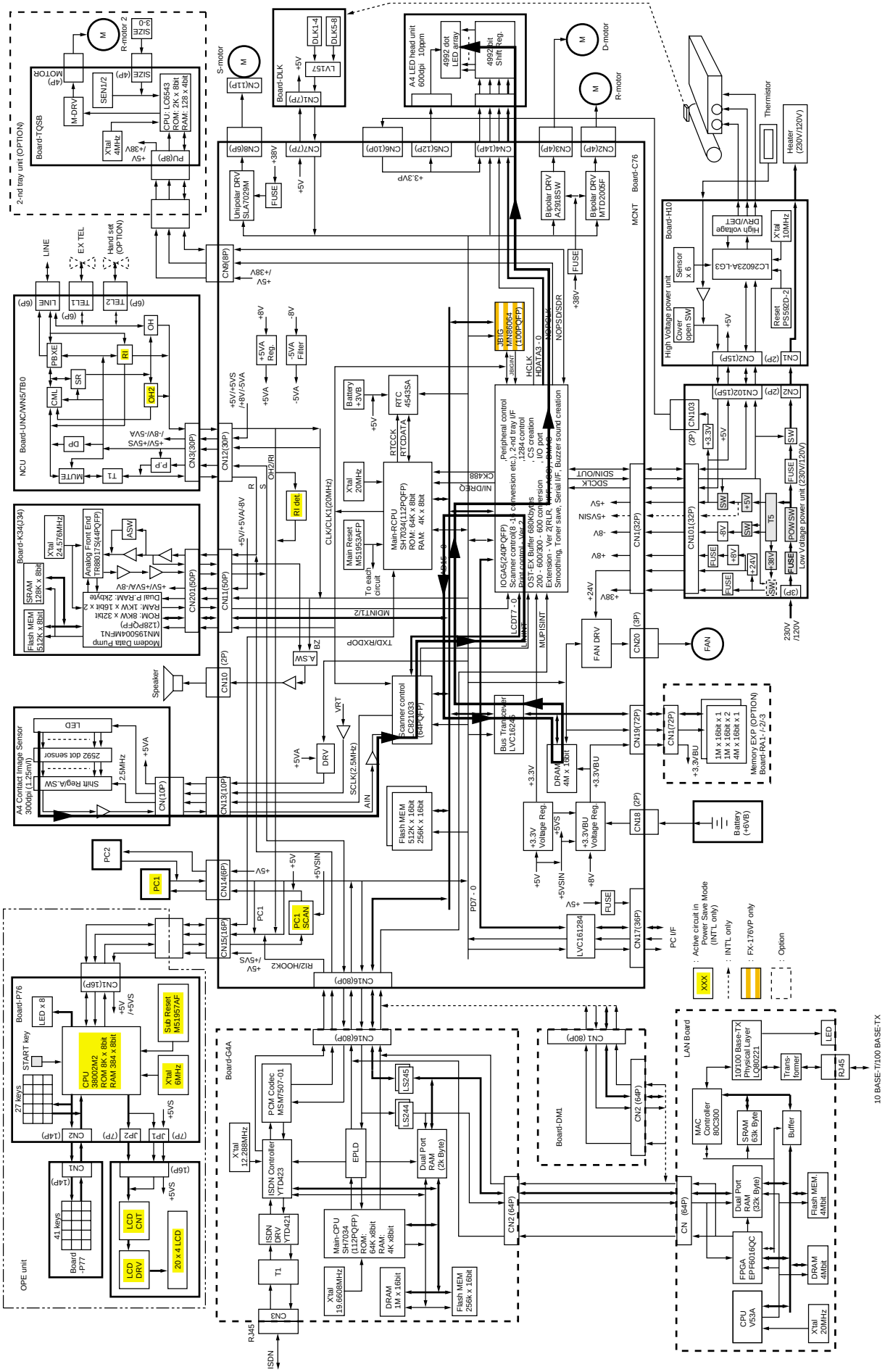
2-1 G3 TX (JBIG): OKIFAX 5950 only

3. G3 RX (MH/MR/MMR)

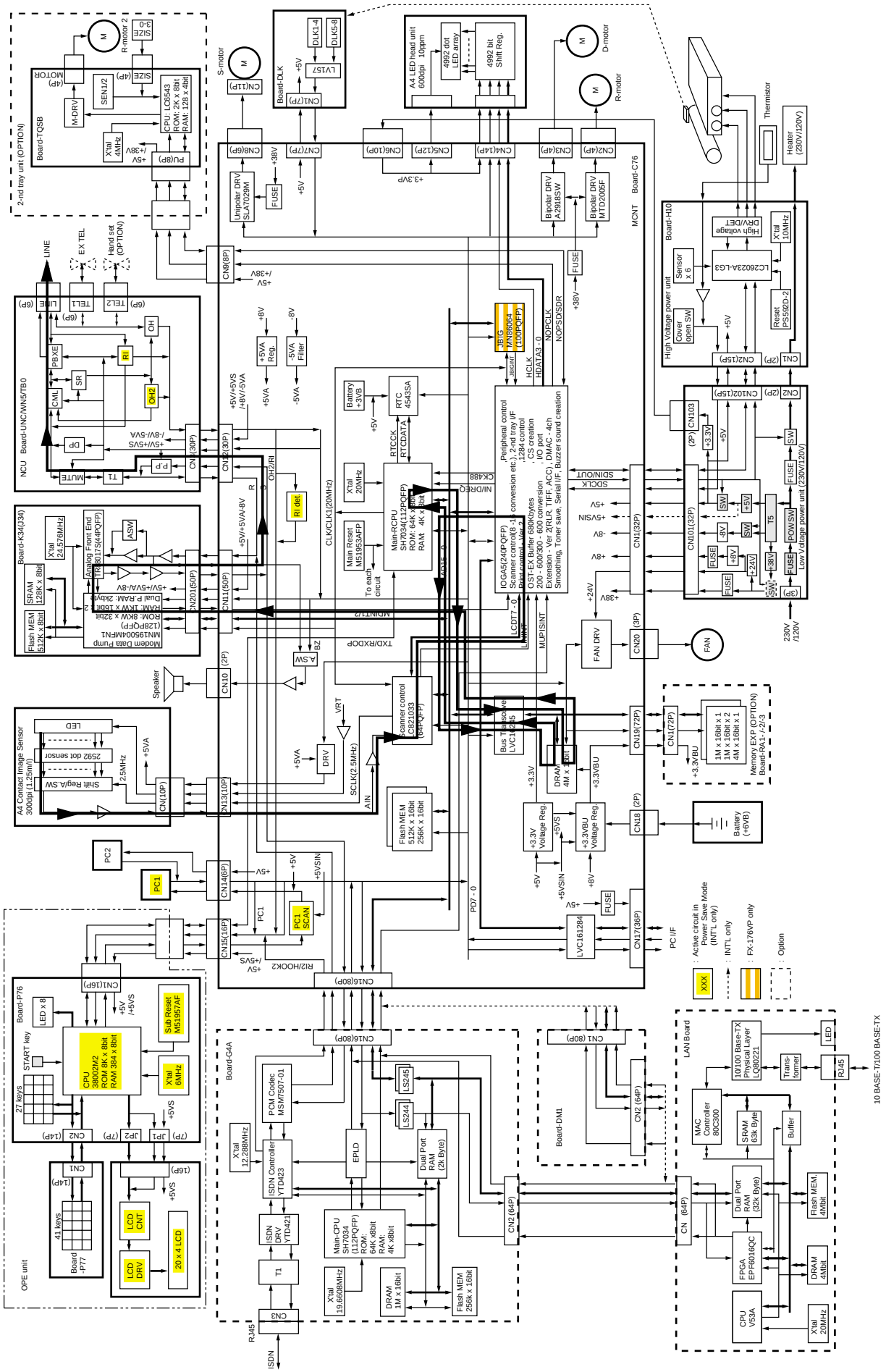
3-1 G3 RX (JBIG): OKIFAX 5950 only

4. PC Print (Option)
5. PC Scanner (Option)
6. PC-FAX TX (Option)
7. PC-FAX RX (Option)
8. ISDN PC-FAX G3 TX (Option)
9. ISDN PC-FAX G3 RX (Option)
10. ISDN G3 TX (Option)
11. ISDN G3 RX (Option)
12. G4 TX (Option)
13. G4 RX (Option)
14. LAN Print (Option), Internet Fax Rx (Option)
15. Internet Fax Tx (Option)
16. G3 Dual Line Tx (Option)
17. G3 Dual Line Rx (Option)

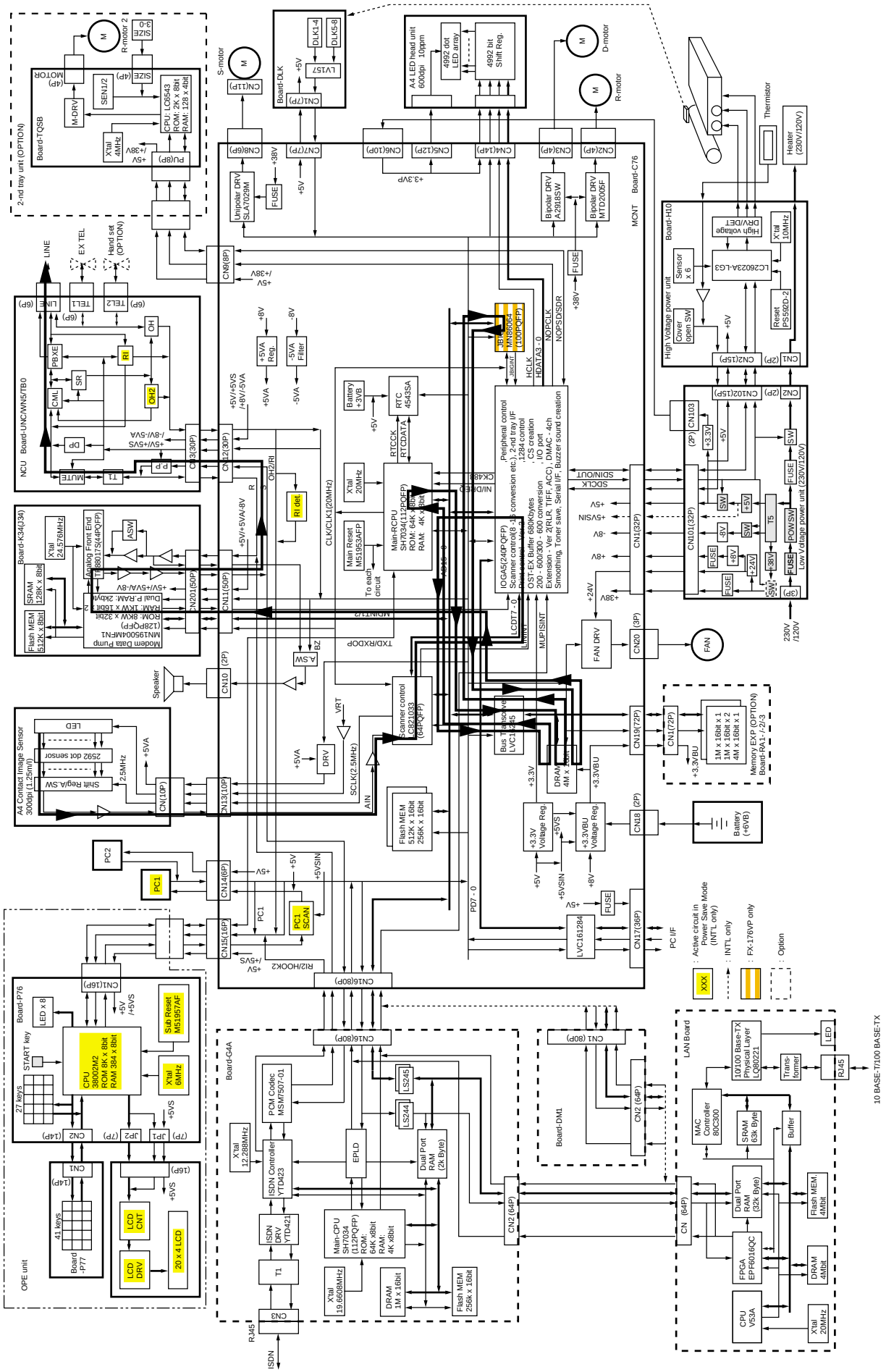
1. COPY


2-nd tray unit (OPTION)
Board-TQSB
R-motor 2
S-motor
Board-DLK
A4 LED head unit 600dpi 10ppm
4992-dot LED array
4992-bit Shift Reg.
D-motor
R-motor
Thermistor
Heater (230V/120V)
MCNT Board-C76
Board-H10
High Voltage power unit
Low Voltage power unit (230V/120V)
NCU Board-UNC/WN5/TB0
Board-K34(J34)
A4 Contact Image Sensor 300dpi (1.25m/l)
Board-P76
OPE unit
Board-G4A
Board-DM1
LAN Board
Memory EXP (OPTION)
Board-RA1 -2/-3
Main-RCPU SH7034(112PQFP) ROM: 64K x 8bit RAM: 4K x 8bit
Scanner control CIS21033 (64PQFP)
Bus Transceiver LVC16245
Flash MEM 512K x 16bit 256K x 16bit
DRAM 4M x 16bit
Battery (+6VB)
FAN DRV
FAN
Speaker
Modem Data Pump MN195004MFN1 (128PQFP)
Analog Front End TR88017S(44PQFP)
Main Reset M51953AFP
RTC 4543SA
Battery +3VB
Bipolar DRV A3918SW
Bipolar DRV MTD2006F
Unipolar DRV SLA7029M
Sensor x 6
LC26023A-LG3
Reset PS592D-2
Cover open SW
Hand set (OPTION)
LINE
EX TEL
Active circuit in Power Save Mode (INT'L only)
INT'L only
FX-176VP only
Option
PC I/F
10 BASE-T/100 BASE-TX

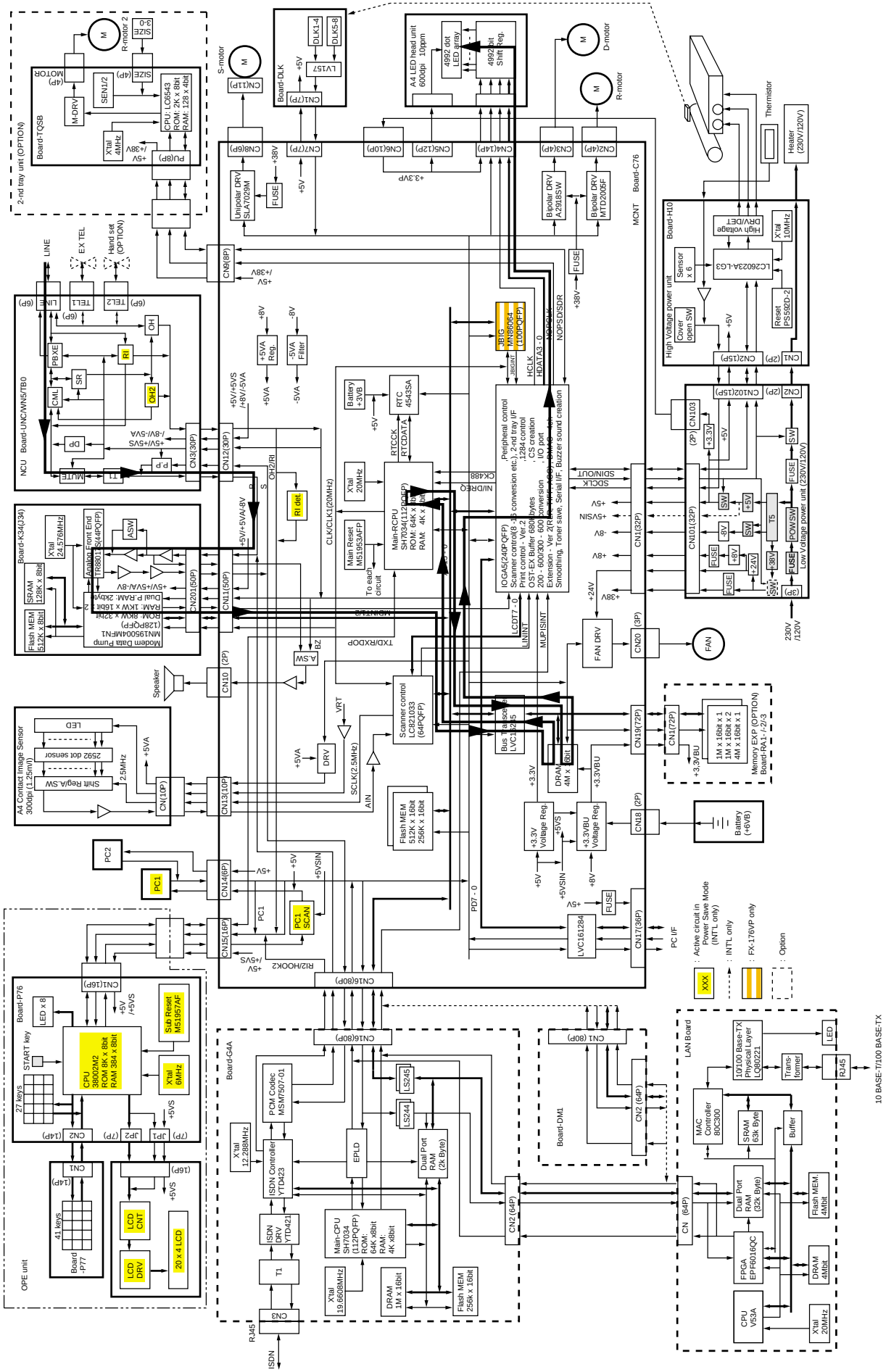
2. G3 TX (MH/MR/MMR)



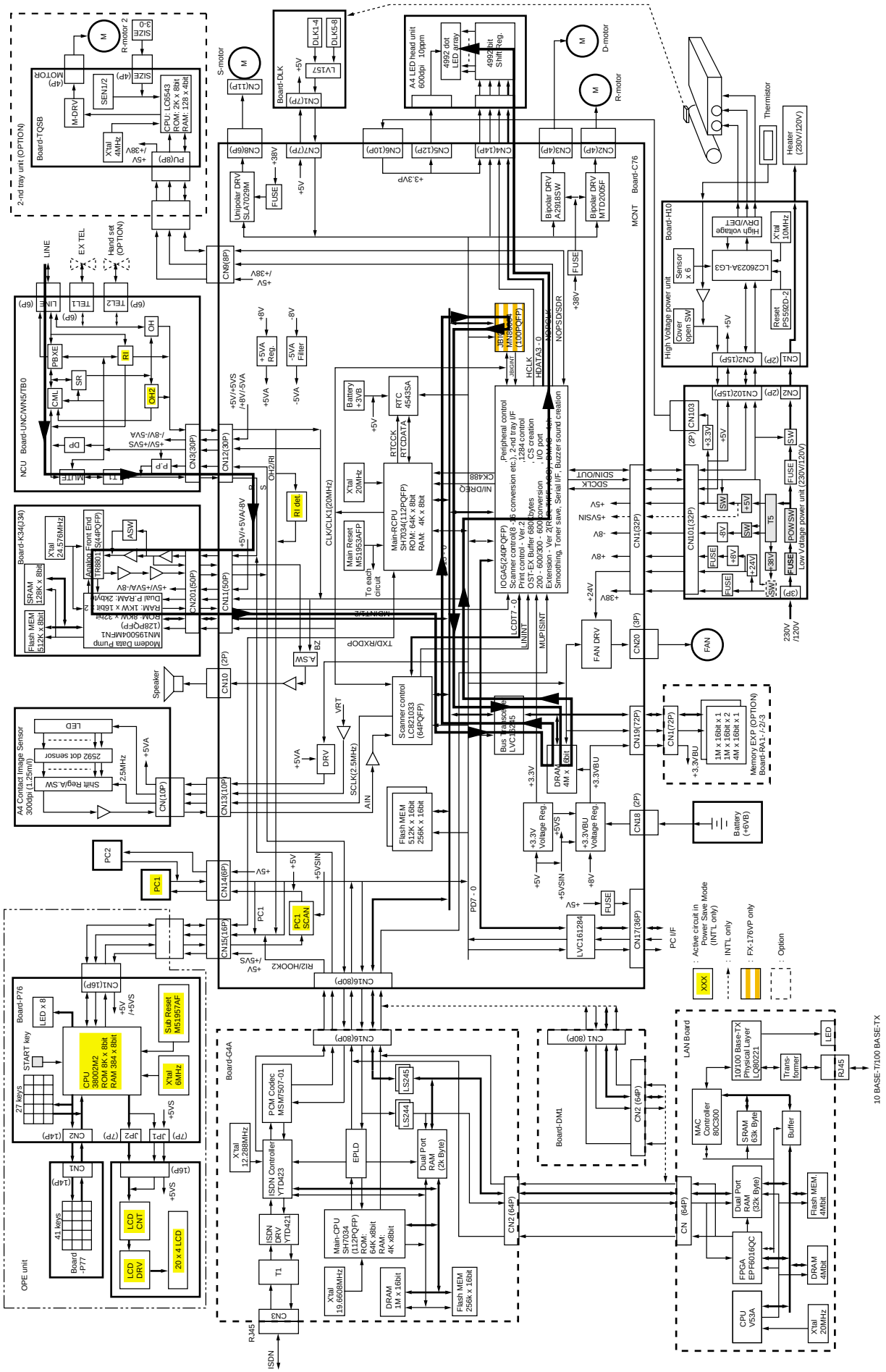
2-1. G3 TX (JBIG) OKIFAX 5950



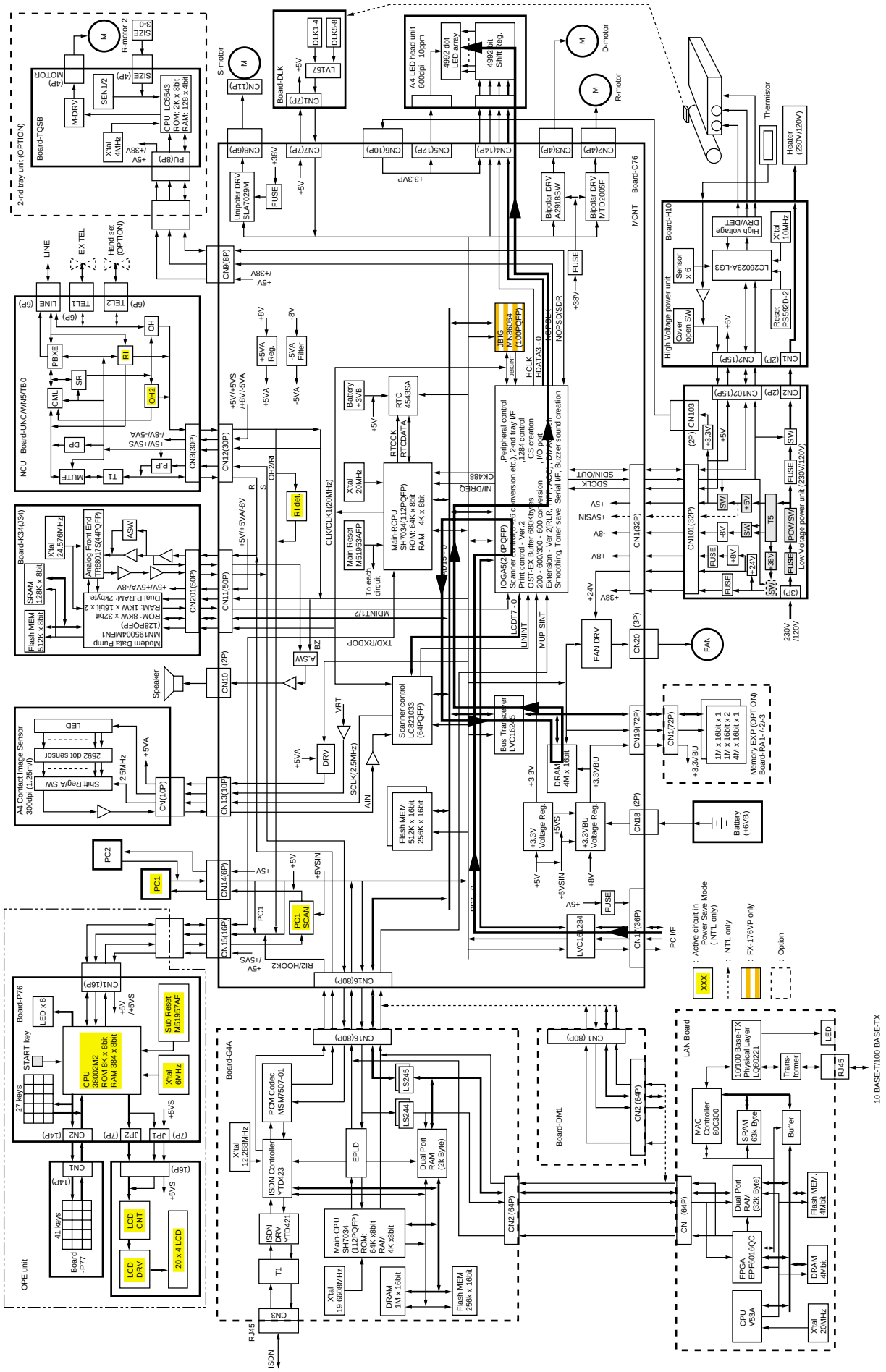
3. G3 RX (MH/MR/MMR)


2-nd tray unit (OPTION)
Board-TQSB
R-motor 2
S-motor
Board-DLK
A4 LED head unit 600dpi 10ppm
D-motor
R-motor
Thermistor
Heater (230V/120V)
MCNT Board-C76
Board-H10
High Voltage power unit
Low Voltage power unit (230V/120V)
NCU Board-UNC/WN5/TB0
Board-K34(J34)
Modem Data Pump MN19500AMFNL (128PQFP)
Main-RCPU SH7034(112PQFP) ROM: 64K x 8bit RAM: 4K x 8bit
IOGA5(240PQFP) Scanner control(8 - 3B conversion etc.), 2-nd tray I/F, Peripheral control, 1284 control, CS creation, I/O port, Print control - Ver.2, OST-EX Buffer 680 bytes, 200 - 600/300 - 600 conversion, Extension - Ver 2(Reset, Sleep, Wake up), Smoothing, Toner save, Serial I/F, Buzzer sound creation
Scanner control LC821033 (64PQFP)
A4 Contact Image Sensor 300dpi (1.25m/l)
Board-P76
OPE unit
Board-G4A
Board-DM1
LAN Board
10 BASE-T/100 BASE-TX
FAN
Battery (+6VB)
Speaker
PC I/F
: Active circuit in Power Save Mode (INT'L only)
: IN'TL only
: FX-176VP only
: Option

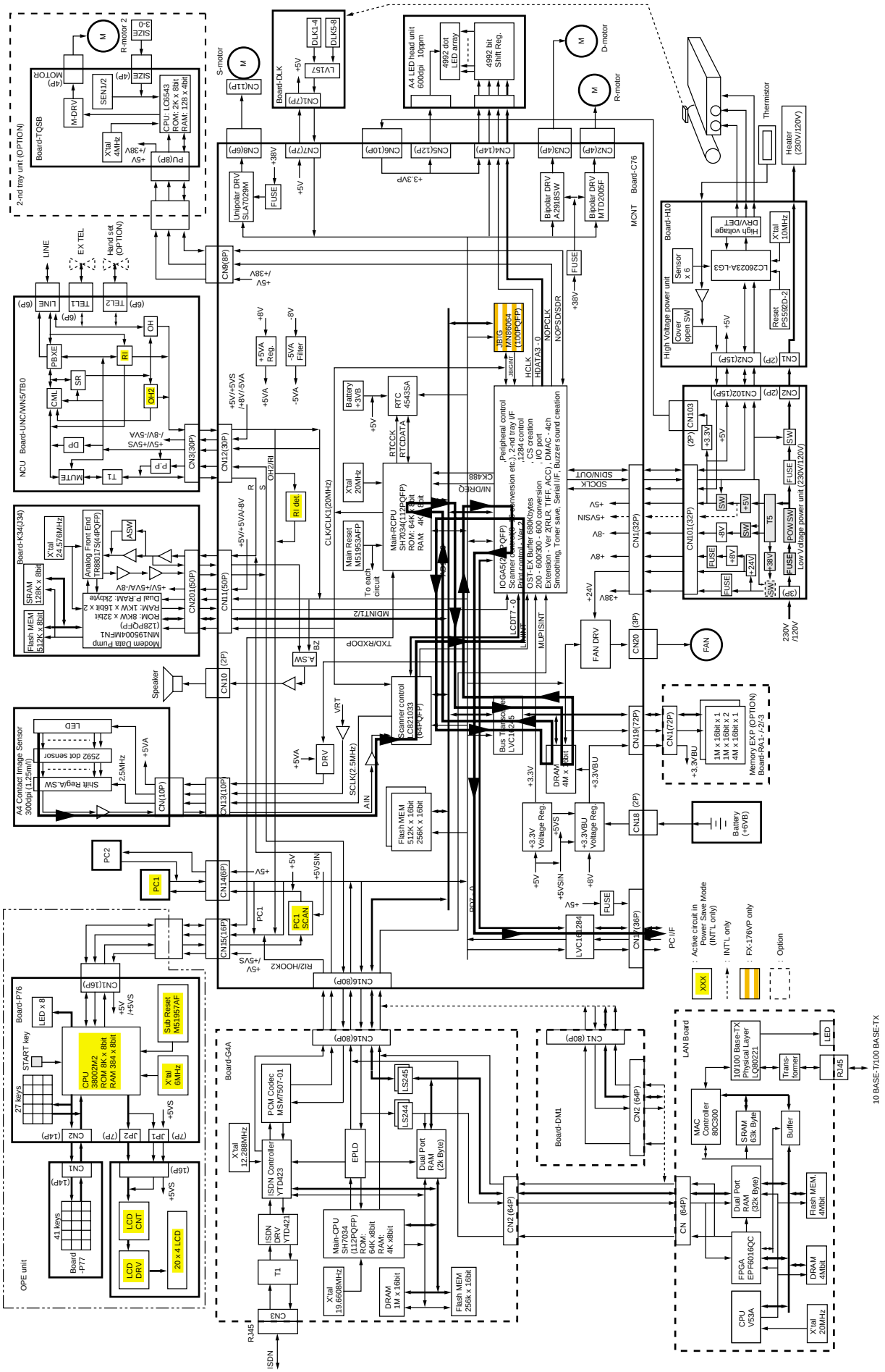
3-1 G3 RX (JBIG) OKIFAX 5950



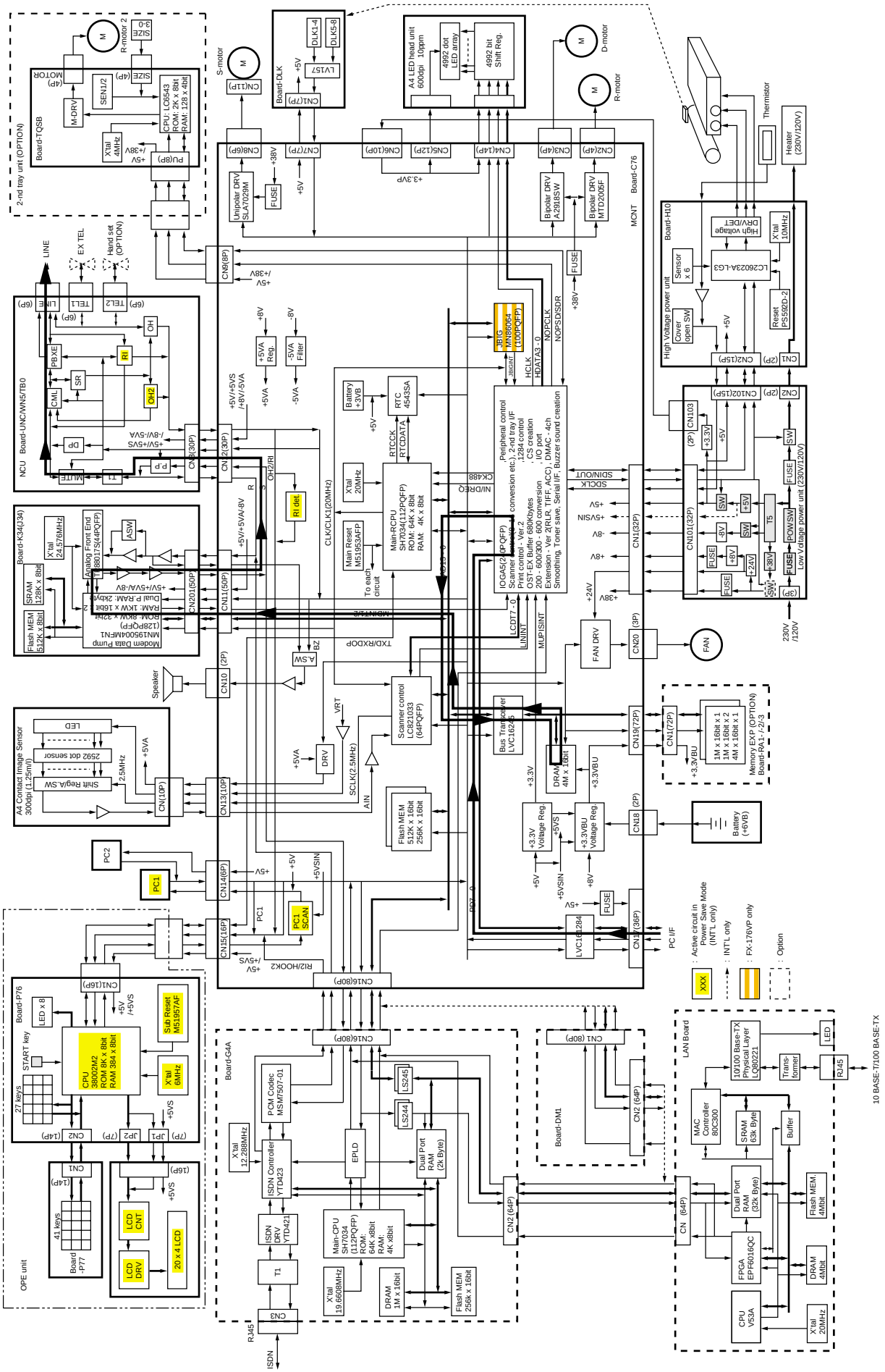
4. PC print (Option)



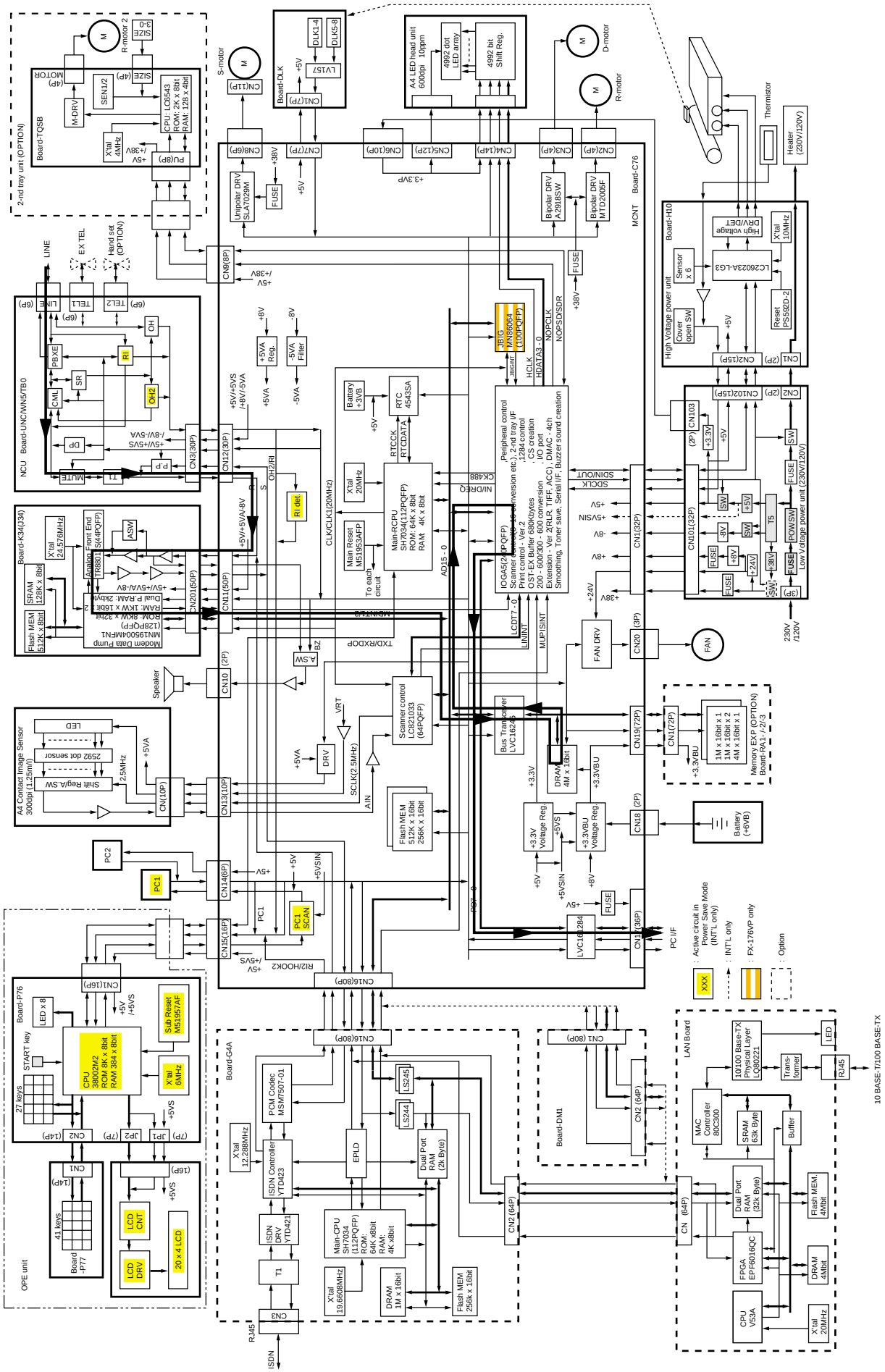
5. PC scanner (Option)



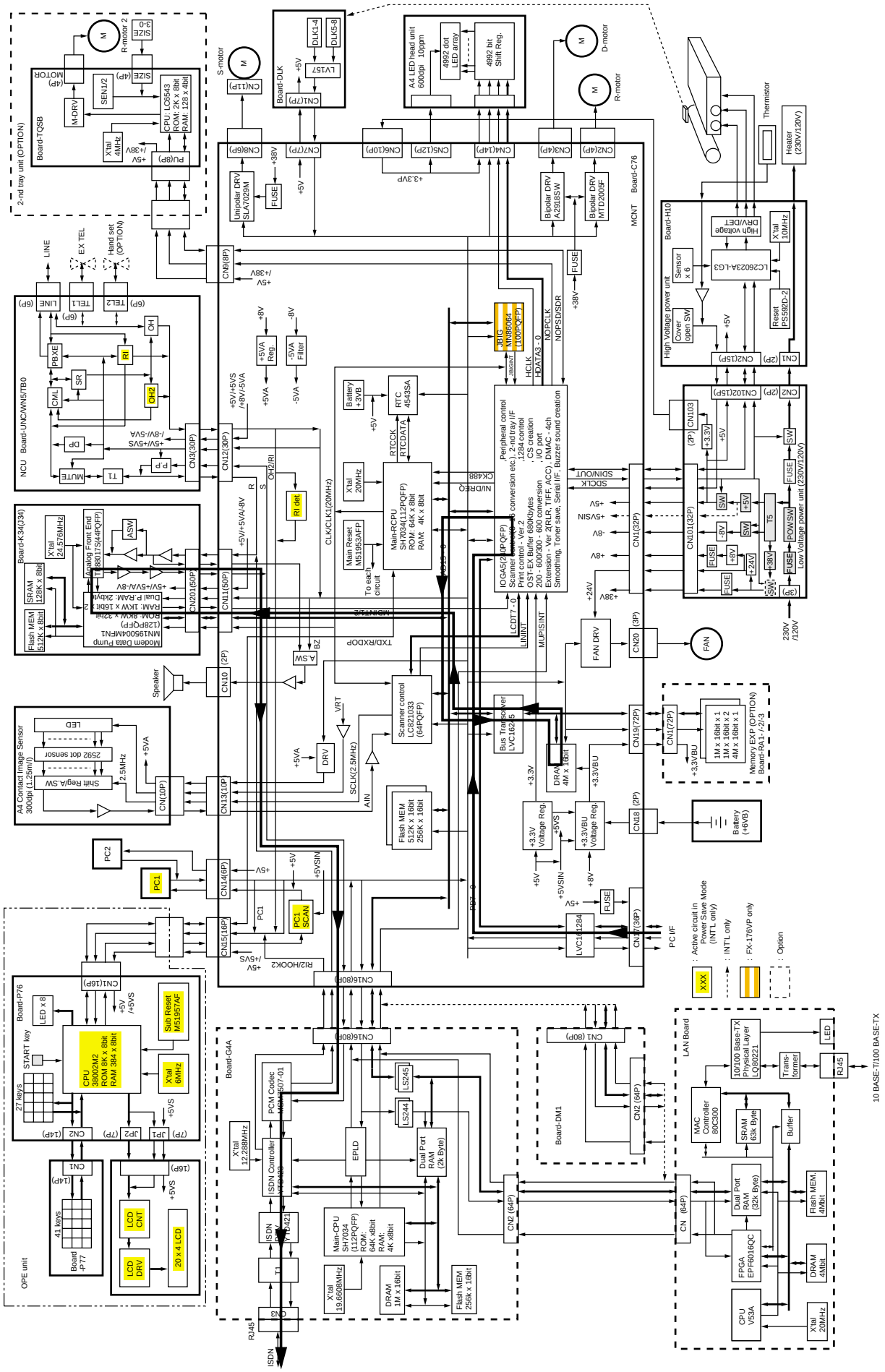
6. PC-FAX TX (Option)



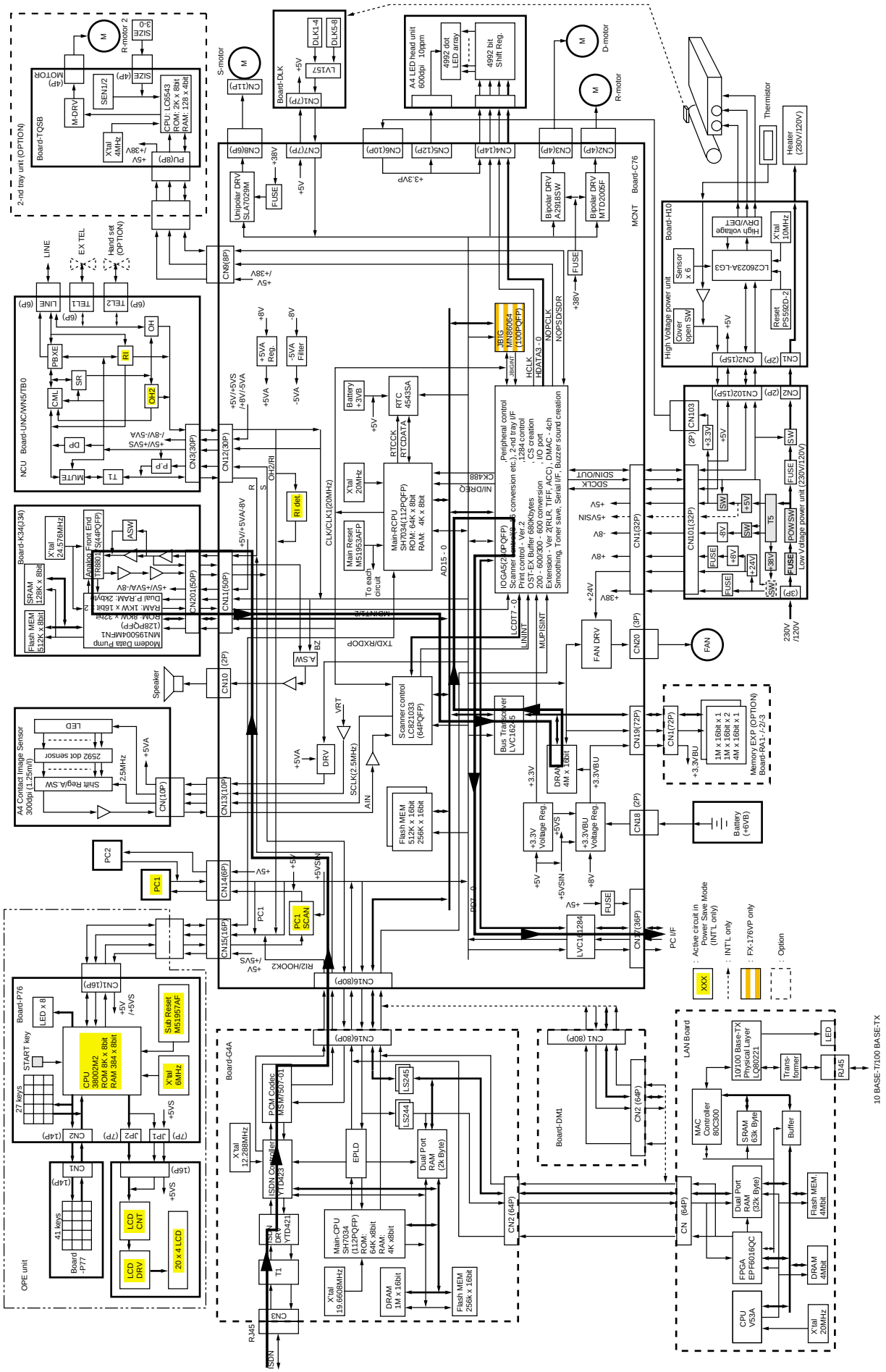
7. PC-FAX RX (Option)



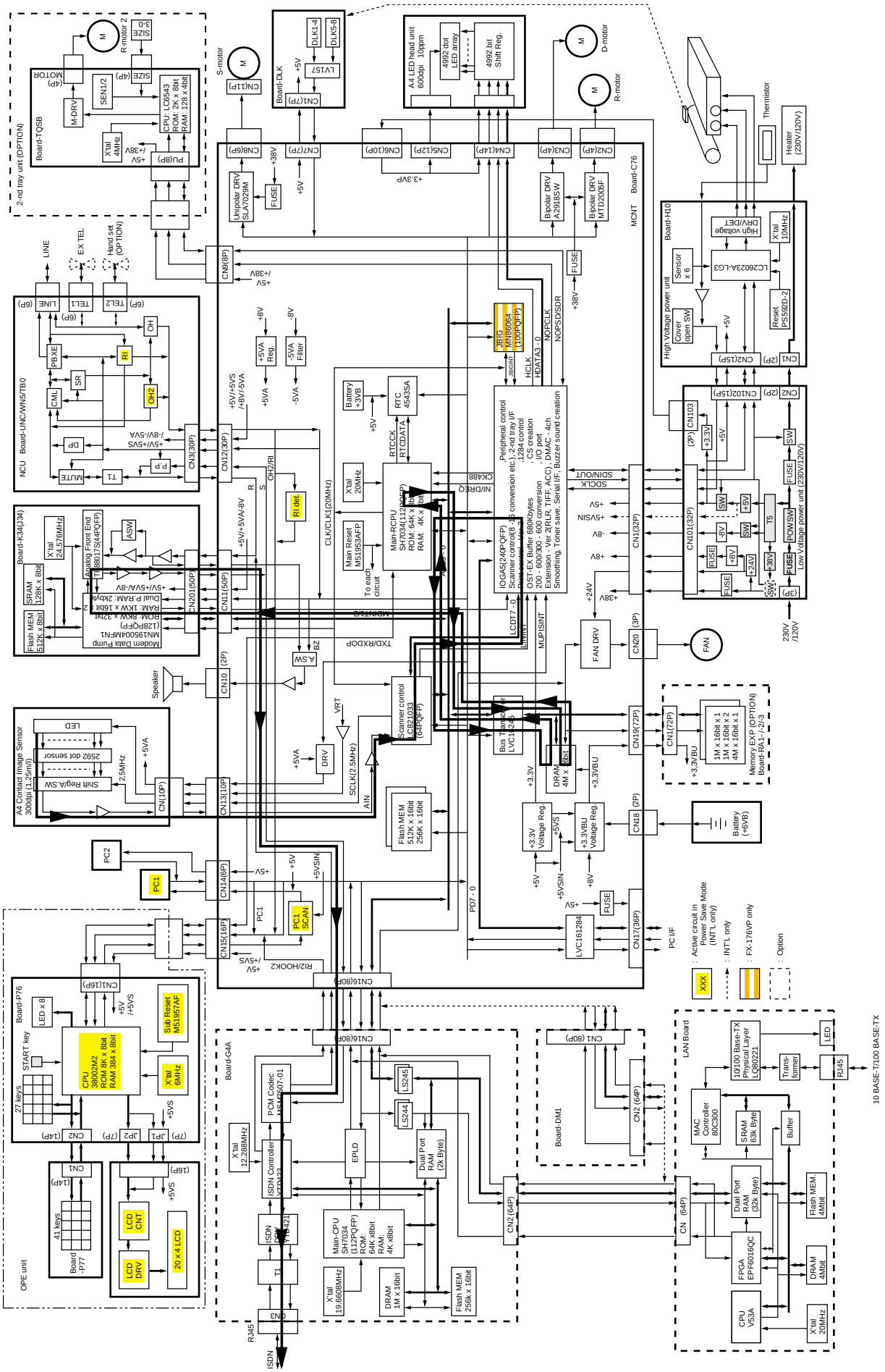
8. ISDN PC-FAX G3 TX (Option)



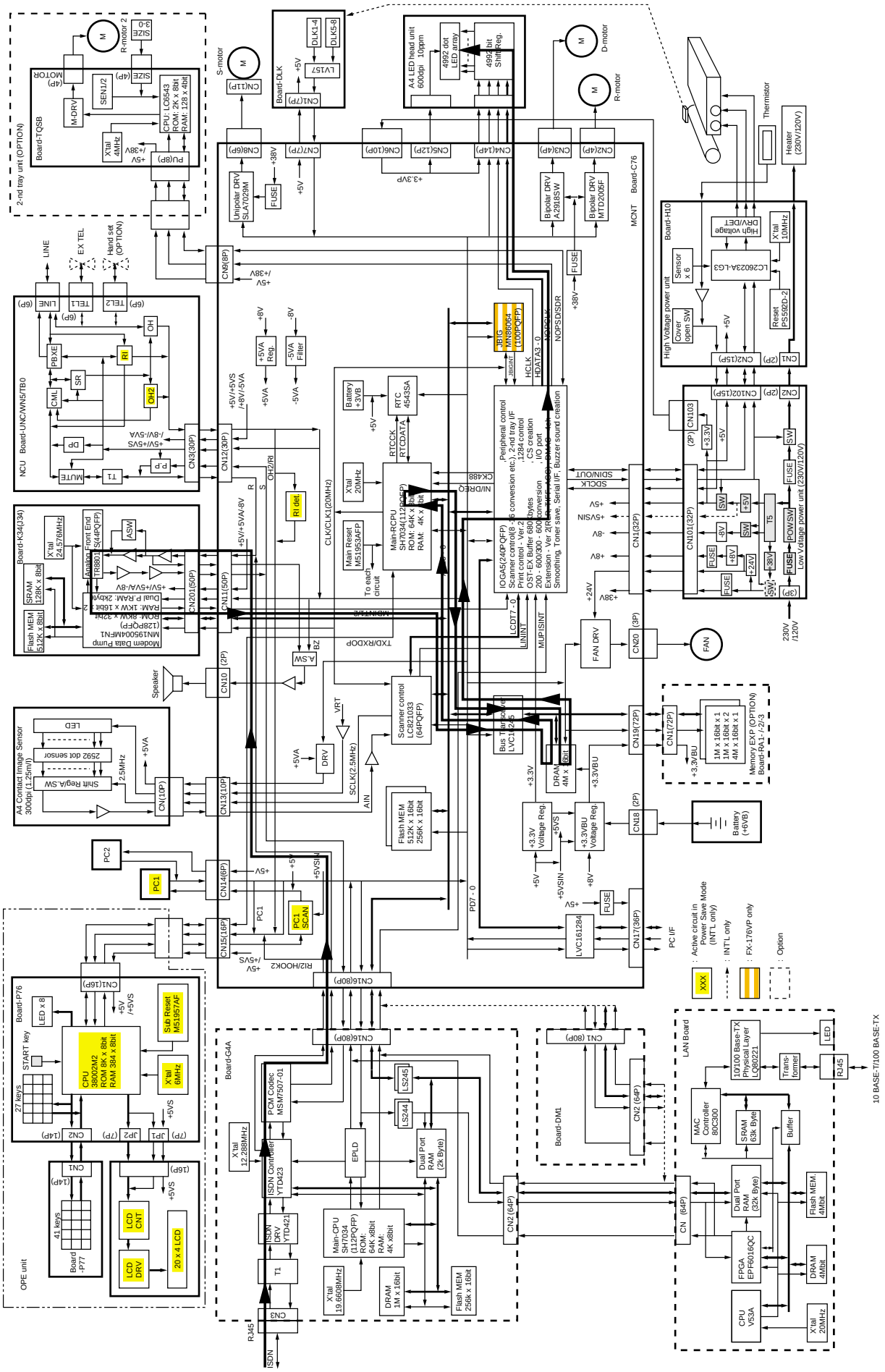
9. ISDN PC-FAX G3 RX (Option)



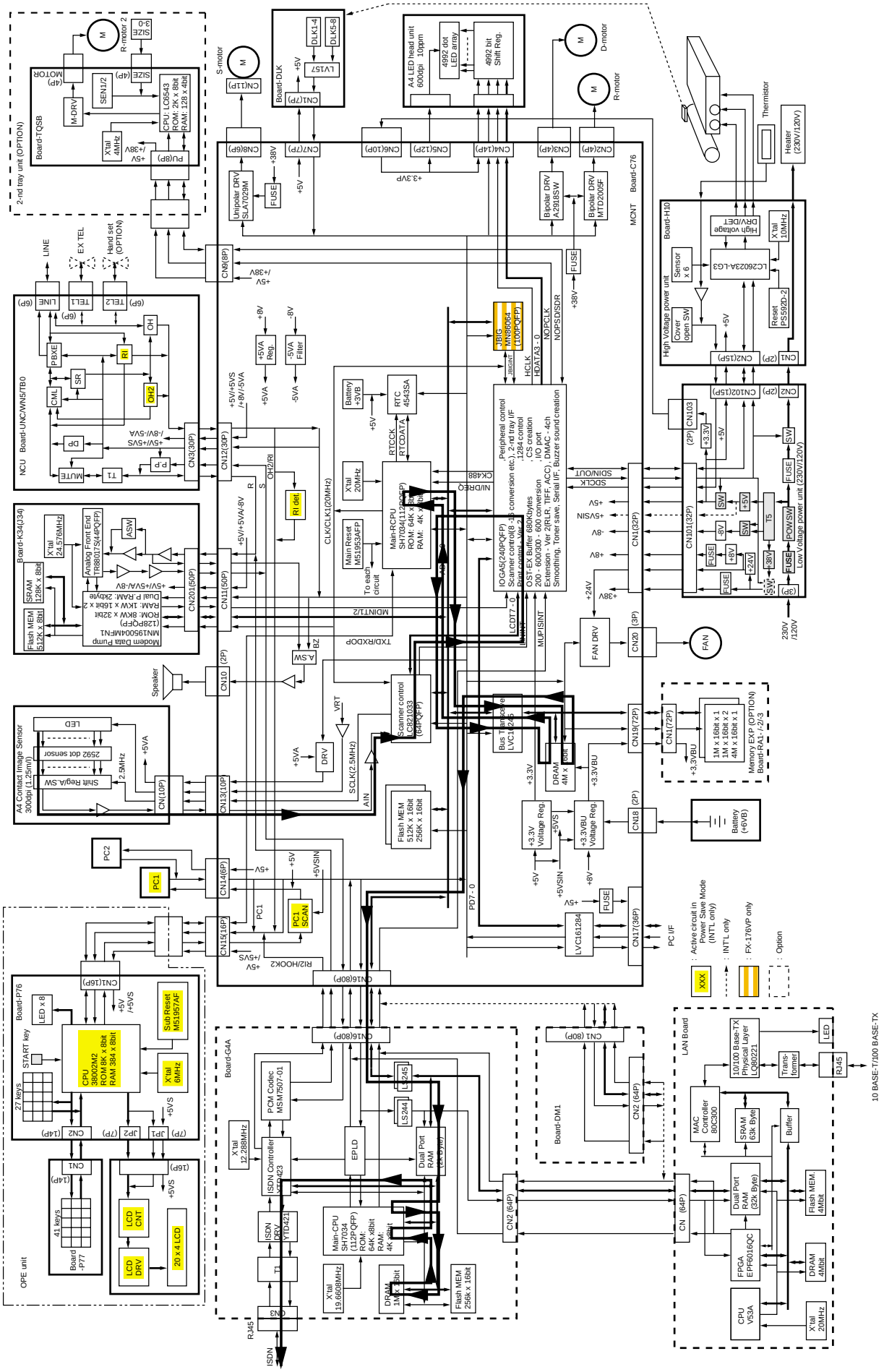
10. ISDN G3 TX (Option)



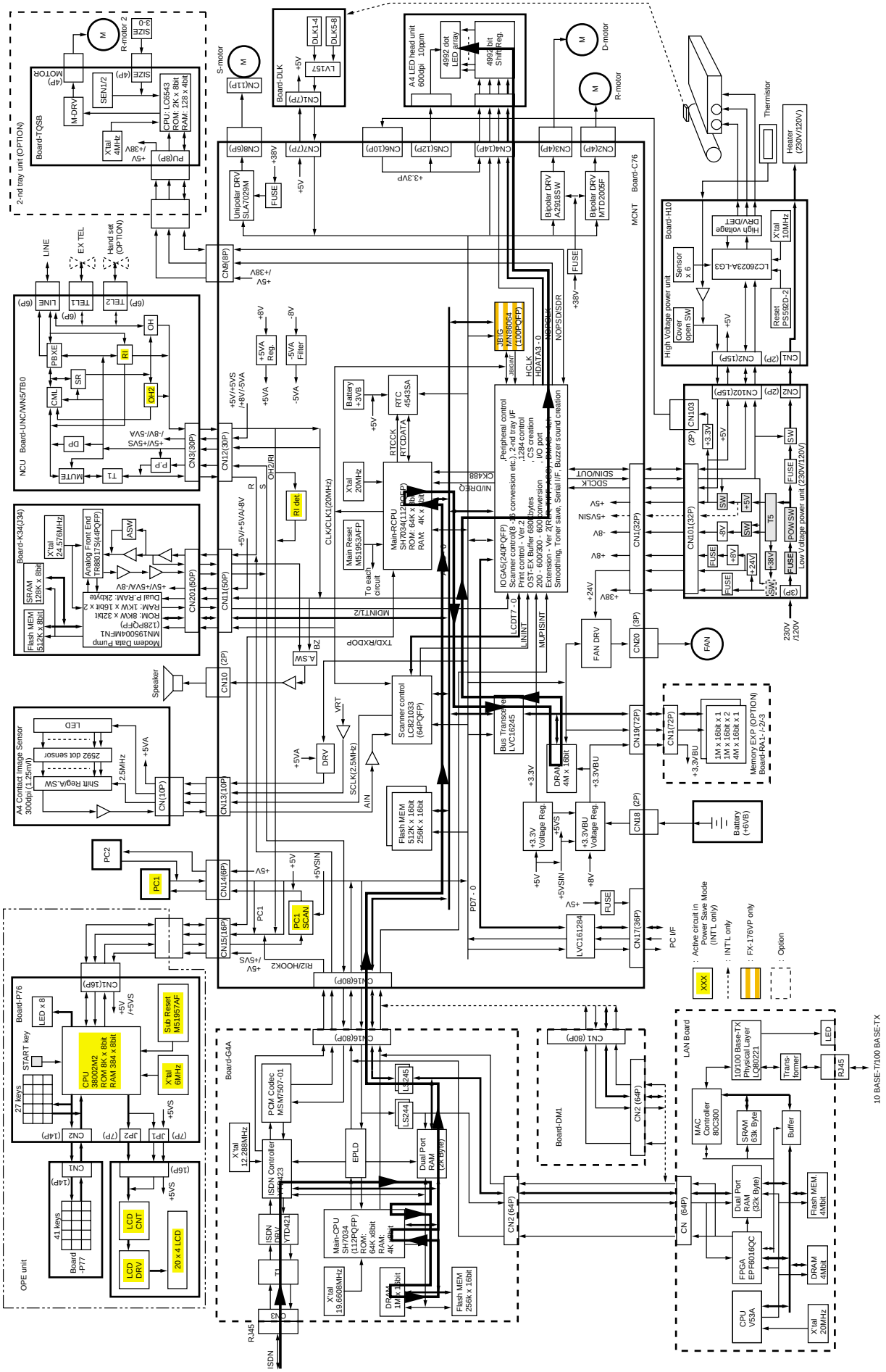
11. ISDN G3 RX (Option)



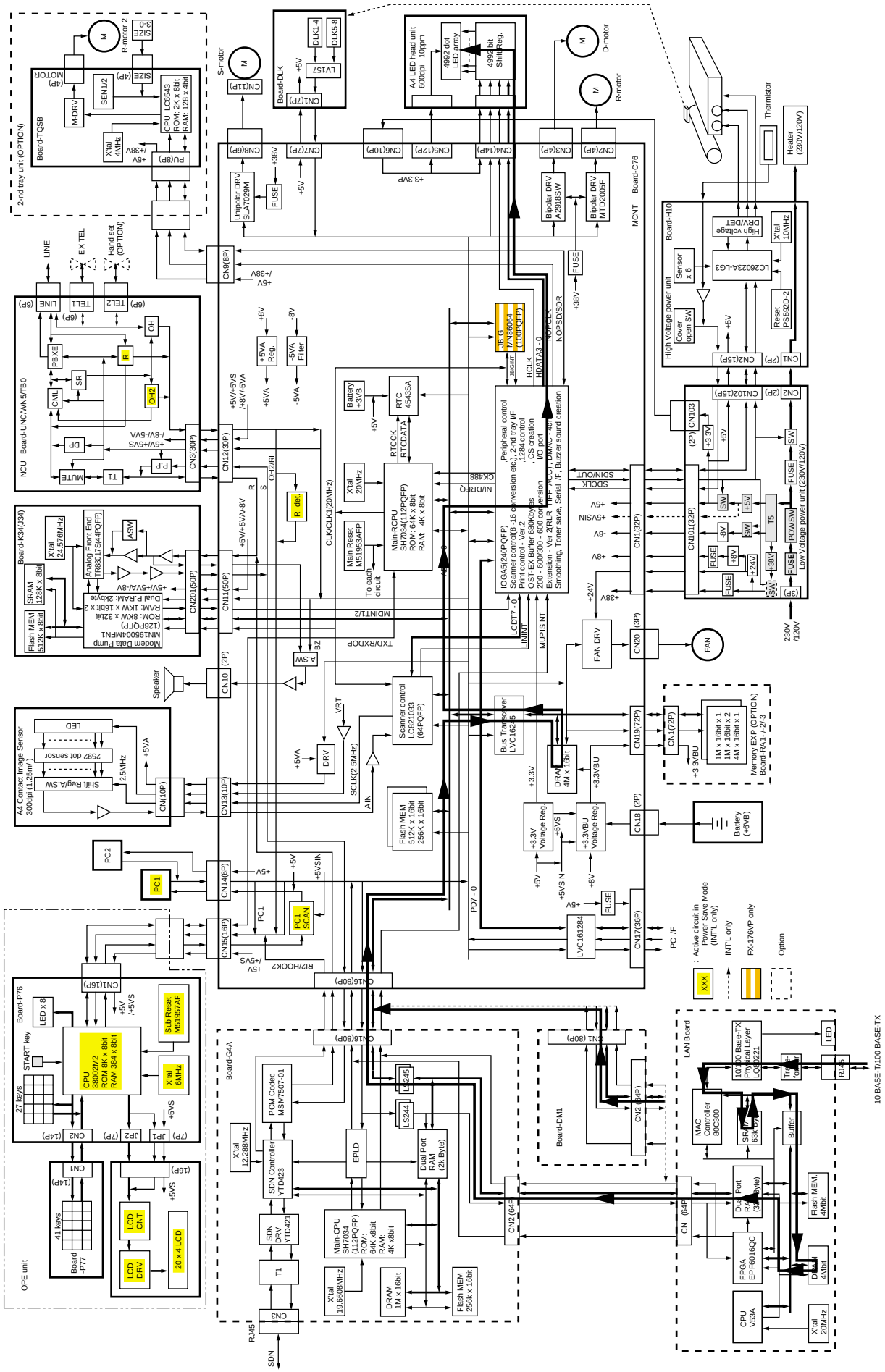
12. G4 TX (Option)



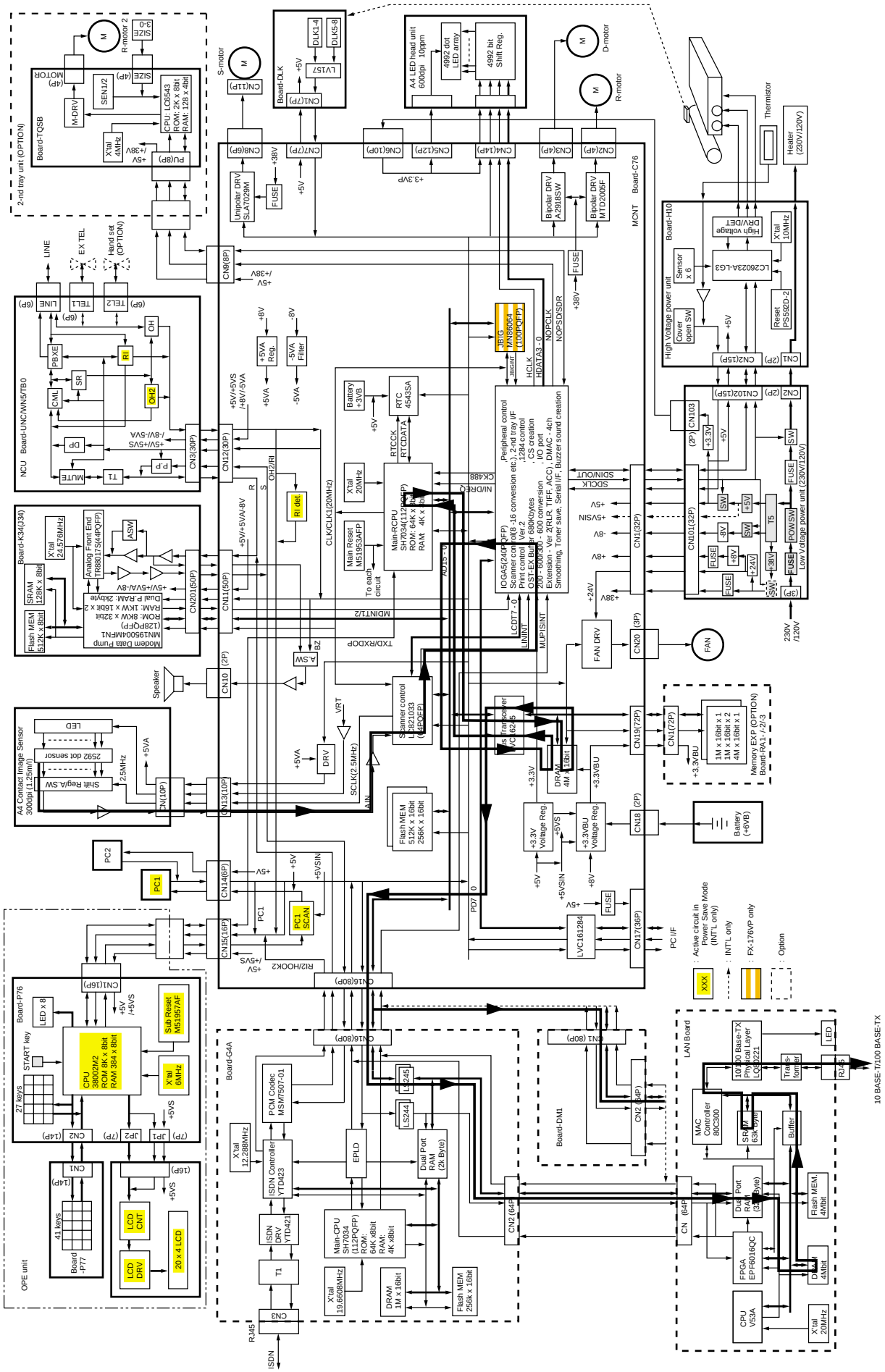
13. G4 RX (Option)



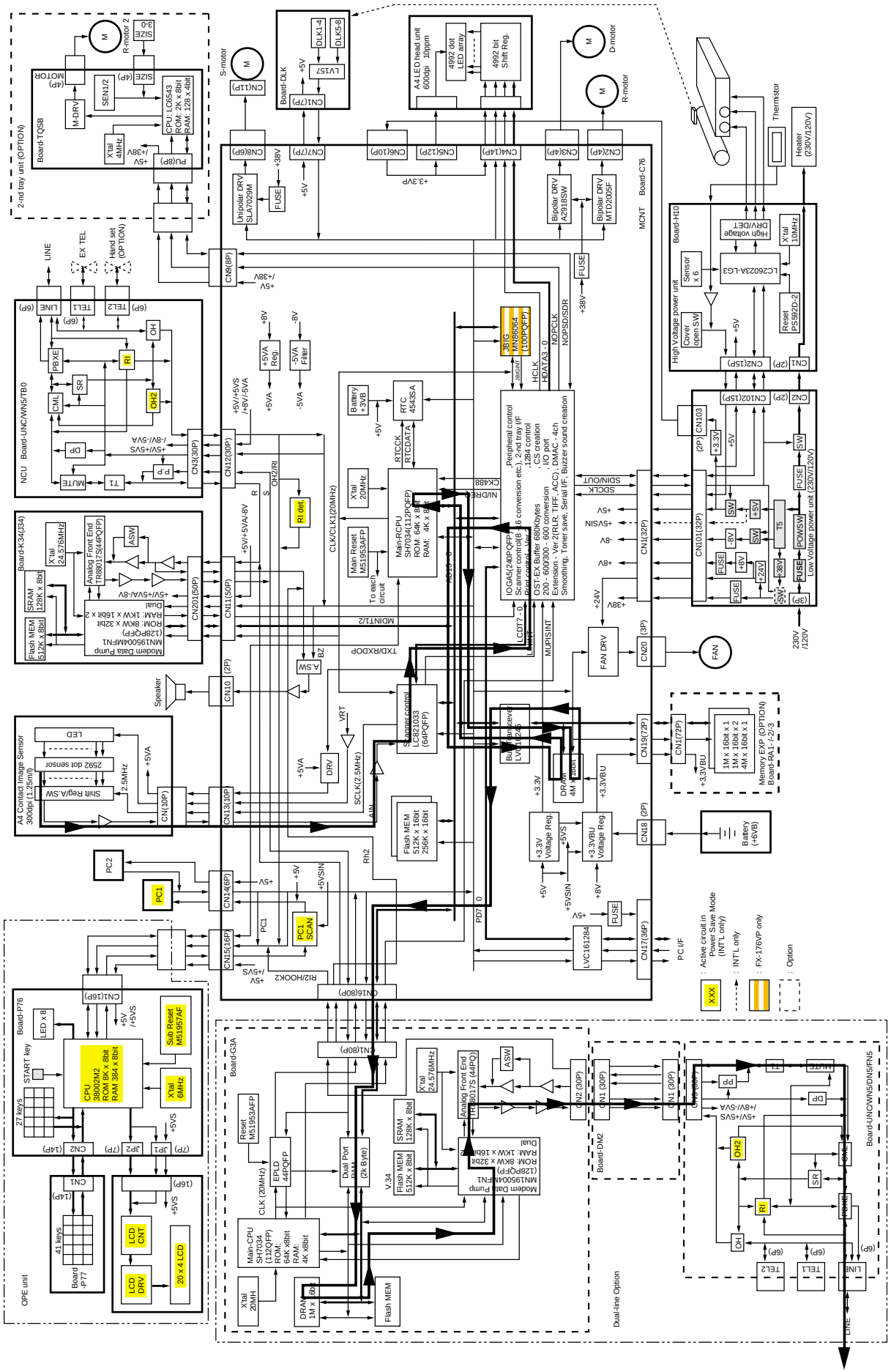
14. LAN print (Option), Internet Fax Rx (Option)



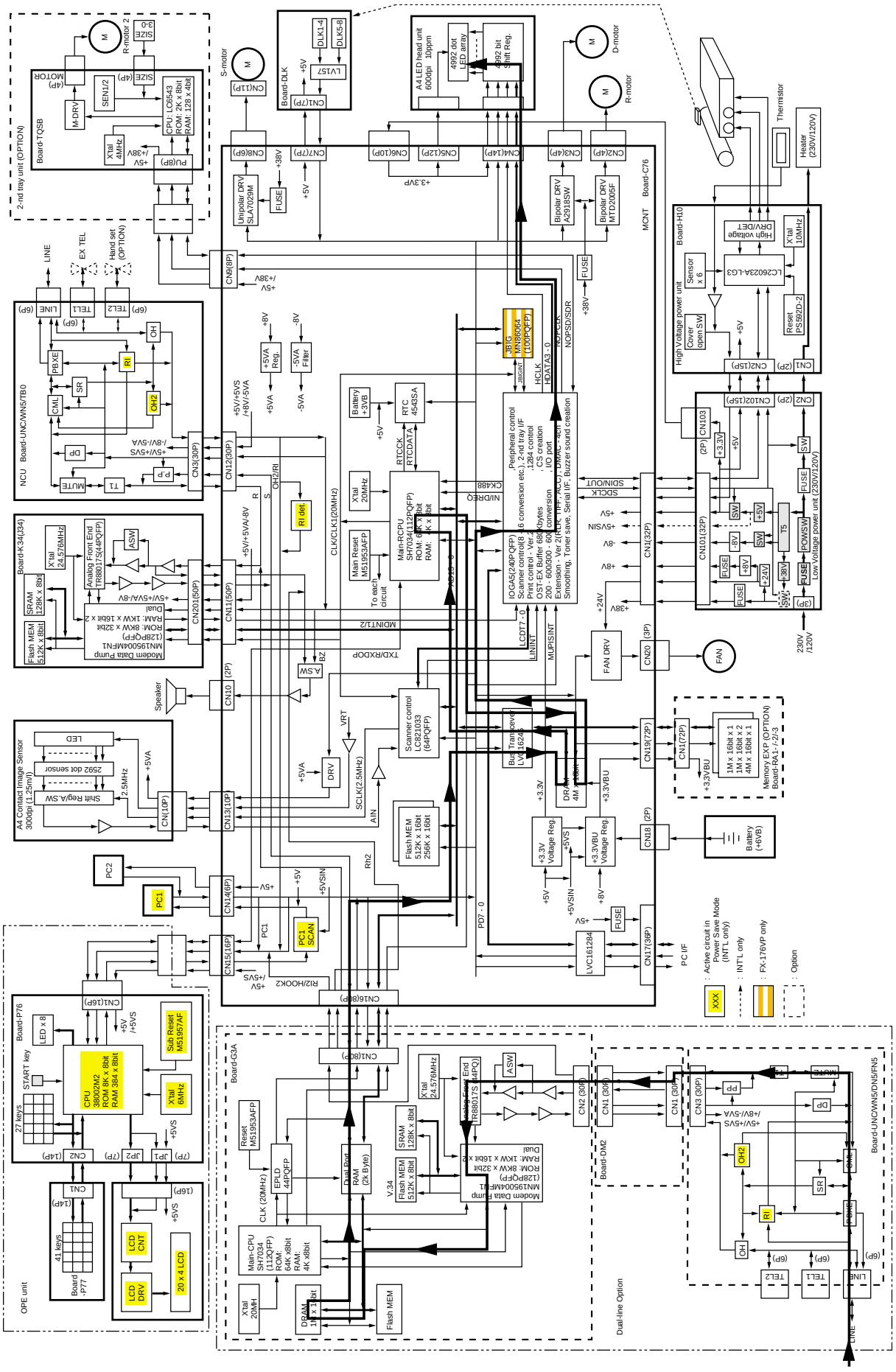
15. Internet Fax Tx (Option)



16. G3 Dual Line Tx (MH/MR/MMR) (Option)



17. G3 Dual Line Rx (MH/MR/MMR) (Option)



A2.2 Explanation of Signal Flowchart

(1) Copy Mode
The analog data output from the image sensor is input to the MCNT-PCB to be amplified by the amplifier. The amplified analog data is input to the scanner controller. Next, the analog data is converted to digital data by the built-in A/D converter. The digital data is corrected by the internal correction function, transferring binary-coded data to the IOGA5 every eighth pixel. The data input to the IOGA5 is temporarily written into the external DRAM (4 megabits x 16 bits). The written data is sent, through the IOGA5, to the LED head in sync with the print operation.

(2) G3 Send Mode (MH/MR/MMR Codes)
The analog data output from the image sensor is input to the MCNT-PCB to be amplified by the amplifier. The amplified analog data is input to the scanner controller. Next, the analog data is converted to digital data by the built-in A/D converter. The digital data is corrected by the internal correction function, transferring binary-coded data to the IOGA5 every eighth pixel. The data input to the IOGA5 is temporarily written into the external DRAM (4 megabits x 16 bits). The written data is converted to MH/MR/MMR codes by firmware, then written into the external DRAM again.
The converted data is sent to the modem board to be modulated. The data modulated by the modem is sent to the NCU board by the Send signal “S”. The data sent to the NCU board is amplified there, then output to the public line.

(3) G3 Receive Mode (MH/MR/MMR Codes)
The signal input from the public line to the NCU board is amplified, input to the modem board as an R signal, demodulated by the modem, and written into the DRAM on the MCNT PCB.
MH/MR/MMR-code data is converted to image data by firmware and written into the DRAM again. The written data is sent, through the IOGA5, to the LED head in sync with the print operation.

(4) G3 Receive Mode (JBIG Code)
The signal input from the public line to the NCU board is amplified, input to the modem board as an R signal, demodulated by the modem, and written into the DRAM on the MCNT PCB.
JBIG-code data is sent to the JBIG control LSI chip to be converted to image data. Then, the image data is written into the DRAM.
The written data is sent, through the IOGA5, to the LED head in sync with the print operation.

(5) G3 Send Mode (JBIG Code)
The analog data output from the image sensor is input to the MCNT-PCB to be amplified by the amplifier. The amplified analog data is input to the scanner controller. Next, the analog data is converted to digital data by the built-in A/D converter. The digital data is corrected by the internal correction function, transferring binary-coded data to the IOGA5 every eighth pixel. The data input to the IOGA5 is temporarily written into the external DRAM (4 megabits x 16 bits). The written data is converted to MH/MR/MMR codes by firmware, then written into the external DRAM again.
The converted data is sent to the JBIG control LSI chip to be converted to JBIG codes. Next, the JBIG-code data is sent to the modem board to be modulated. The data modulated by the modem is sent to the NCU board by the Send signal “S.” The data sent to the NCU board is amplified there, then output to the public line.

(6) PC Print

The data input from the MCNT's parallel I/F is input, through the IOGA5, to the DRAM using DMA.

The input data is transferred to the DEC block in the IOGA5 using DMA.

In the DEC block, the data is expanded in the 1-line raster buffer in the IOGA5. Then, the expanded data is sent to the video block in the IOGA5 in response to a 1-line synchronous signal. In the video block, image processing is performed for printing and the resultant data is transferred to the LED head.

(7) PC Scanner

The analog data output from the image sensor is input to the MCNT-PCB to be amplified by the amplifier. The amplified analog data is input to the scanner controller. Next, the analog data is converted to digital data by the built-in A/D converter. The digital data is corrected by the internal correction function, transferring binary-coded data to the IOGA5 every eighth pixel. The data input to the IOGA5 is temporarily written into the external DRAM (4 megabits x 16 bits). The written data is compressed to TIF data by firmware, then written into the external DRAM again.

The written TIF data is sent to the MCNT's parallel I/F through the IOGA5.

A3.1 MCNT

A3.1.1 CPU

A3.1.1.1 Functions

A 32-bit RISC CPU is used as a core and it is provided with the following peripheral functions:

- Built-in PROM/Mask ROM
- Built-in RAM
- Bus state controller (DRAM control and chip select creation)
- Interrupt controller
- DMA controller
- 16-bit timer pulse unit
- Serial communication interface

(1) CPU's throughput
The basic clock frequency is 20 MHz. A program/data is stored in the built-in ROM/RAM. The rated throughput is 20 MIPS when optimum object code has been created. However, the actual throughput is reduced due to the access times needed by external devices.

(2) Built-in PROM/Mask ROM
The built-in ROM size is 64 KB and memory addresses range from 000000h to 000FFFh.

(3) Built-in RAM
The built-in RAM size is 4 KB and memory addresses range from FFFF000h to FFFFFFFh.

(4) Bus state controller
The bus state controller controls the DRAM and accesses the flash ROM and external devices.
(Figure 6.1 shows the timing chart of the basic bus cycle.)

(5) Interrupt controller
This system has nine interrupts. Three interrupts /IRQ 4, /IRQ6, and /IRQ7 are used but the other six interrupts /IRQ0 to /IRQ3, IRQ5, and NMI are not used.

Interrupts are allocated as follows:

/IRQ7 = Print-related user timer interrupt

/IRQ6 = Matsushita V.34 modem interrupts 1and 2, Sanyo V.17 modem, encryption, line ringing tone (Ring), Sanyo read control IC

/IRQ4 = Centronics I/F controller interrupt, JBIG chip interrupt, MUPIS I/F, power I/F, second tray I/F, user DMA channel 4/5 (Centronics), use DMA channel 6/7 (JBIG)

(6) DMA controller
Two channels of DMAs with external transfer request (DREQ) and acknowledge (DACK) pins and two channels of DMAs without DREQ/DACK pins are incorporated.

DMA channel 0 (with DREQ/DACK): Used for transfer form read image processing LSI chip to memory.

DMA channel 1 (with DREQ/DACK): Used for transfer from memory to IOGA print image processor.

DMA channel 2 (without DREQ/DACK): Not used.

DMA channel 3 (without DREQ/DACK): Used to count main motor operating pulses.

(7) 16-bit timer pulse unit
Channels are used as follows:

ITU channel 0: Used as a 5-ms system timer.

ITU channel 1: A desired time-out time (0 - 13.1 ms) can be specified in steps of 0.2 μs.

ITU channel 2: A 204.8-μs (4.883 kHz) clock signal is input from the TCLKC pin. The clock signal is used in the external clock count mode to make measurement in units of 204.8 μs. The measurement range is from about 0.2 ms to 13.422 sec.

ITU channel 3: Used for drum motor phase control.

ITU channel 4: Used for resist motor phase control.

(8) Serial communication interface
In this system, SCI channel 0 is used in the start-stop mode as the interface with the OPE.

A3.1.2 IOGA5

A3.1.2.1 Purpose and Overview of This ASIC

It controls the facsimile and printer, provides an interface with the PC, and implement MFP and the functions listed below.
The block diagram of this ASIC is shown on the next page.

Major functions of this LSI are as follows:

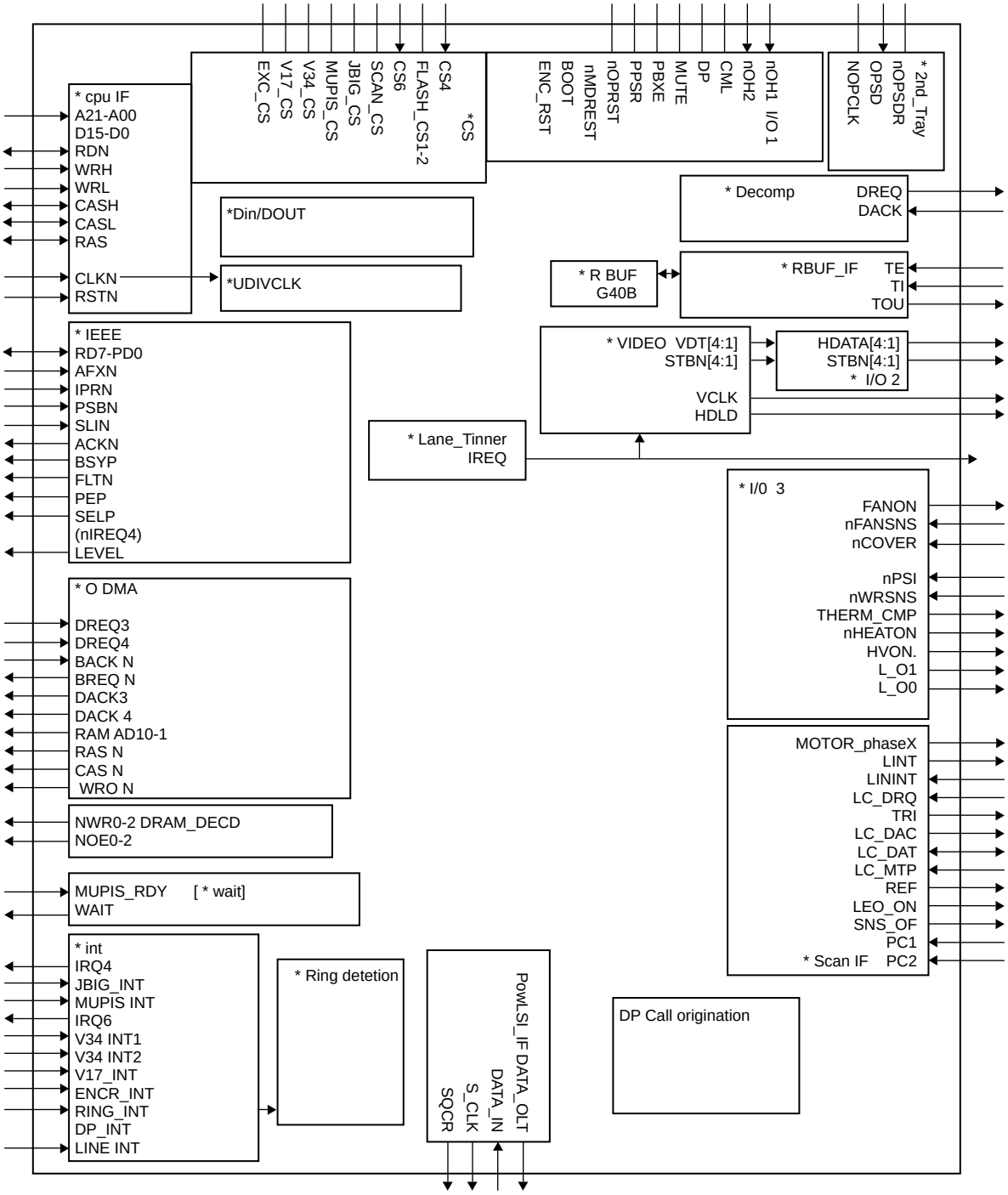
(1) Printer control
T600 dpi printing/ACC expansion/200-600 conversion or 300Æ600 conversion/smoothing (200Æ600)/high voltage control

(2) Interfacing with scanner control LSI
8-to-16 conversion

(3) IEEE1284 control

(4) DMA 4-channel

(5) Peripheral control
CS generation/ I/O port

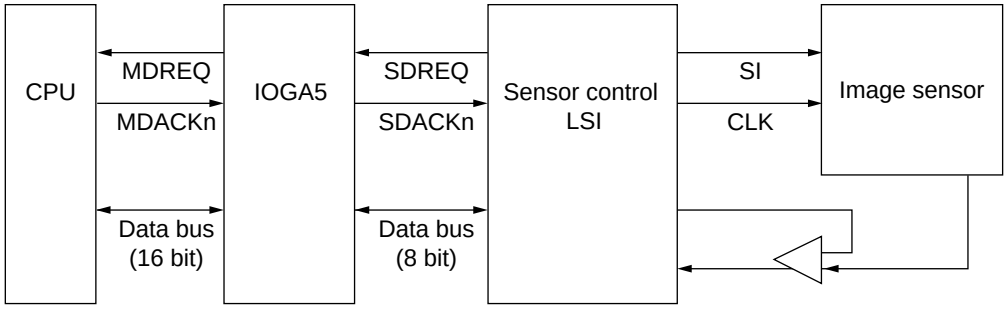

EXC_CS
V17_CS
V34_CS
MUPIS_CS
JBIG_CS
SCAN_CS
CS6
FLASH_CS1-2
CS4
*CS
ENC_RST
BOOT
nMDREST
nOPRST
PPSR
PBXE
MUTE
DP
CML
nOH2
nOH1 I/O 1
NOPCLK
OPSD
nOPSDR
* 2nd_Tray
* cpu IF
A21-A00
D15-D0
RDN
WRH
WRL
CASH
CASL
RAS
CLKN
RSTN
*Din/DOUT
*UDIVCLK
* Decomp
DREQ
DACK
* R BUF
G40B
* RBUF_IF
TE
TI
TOU
* IEEE
RD7-PD0
AFXN
IPRN
PSBN
SLIN
ACKN
BSYP
FLTN
PEP
SELP
(nIREQ4)
LEVEL
* VIDEO VDT[4:1]
STBN[4:1]
VCLK
HDLD
HDATA[4:1]
STBN[4:1]
* I/O 2
* Lane_Tinner
IREQ
* I/0 3
FANON
nFANSNS
nCOVER
nPSI
nWRSNS
THERM_CMP
nHEATON
HVON.
L_O1
L_O0
* O DMA
DREQ3
DREQ4
BACK N
BREQ N
DACK3
DACK 4
RAM AD10-1
RAS N
CAS N
WRO N
MOTOR_phaseX
LINT
LININT
LC_DRQ
TRI
LC_DAC
LC_DAT
LC_MTP
REF
LEO_ON
SNS_OF
PC1
* Scan IF PC2
NWR0-2 DRAM_DECD
NOE0-2
MUPIS_RDY [* wait]
WAIT
* int
IRQ4
JBIG_INT
MUPIS INT
IRQ6
V34 INT1
V34 INT2
V17_INT
ENCR_INT
RING_INT
DP_INT
LINE INT
* Ring detetion
PowLSI_IF DATA_OLT
DATA_IN
S_CLK
SQCR
DP Call origination

A3.1.3 Scanner Control

A3.1.3.1 Overview

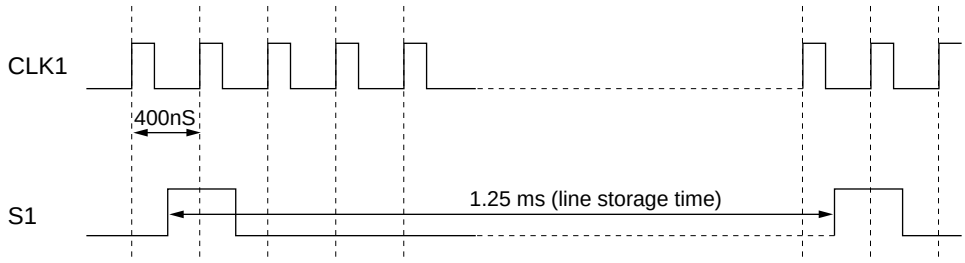
This system uses a monochromic 300-DPI image sensor. It also uses a 1-chip LSI for sensor control.
The overall block diagram is shown on the next page.

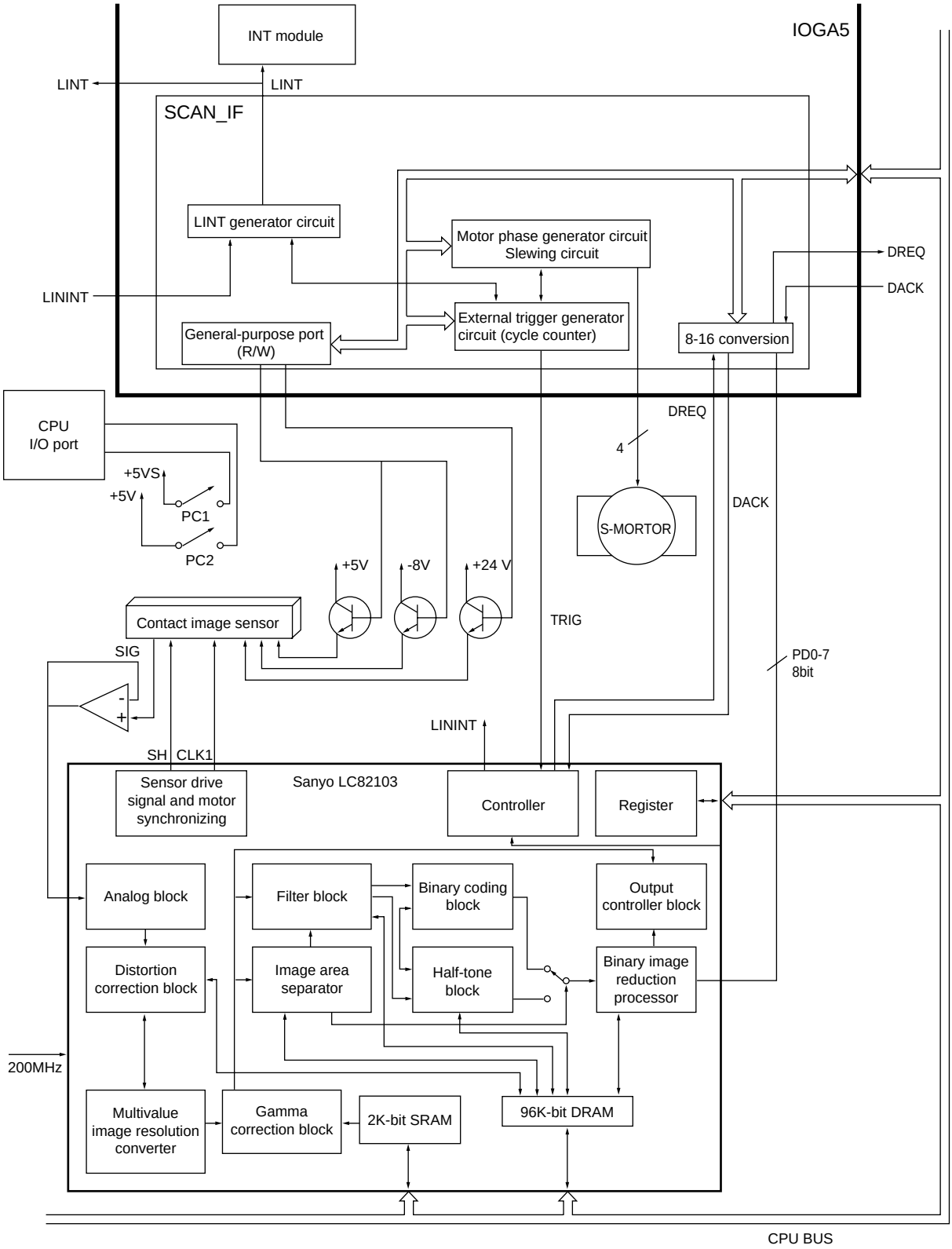
(1) Interface
The IOGA5 receives image data from the sensor control LSI, and sends it to the host CPU in blocks of 16 bits (2 words).



(2) Sensor Specifications
Pixel density: 300 DPI
Number of significant pixels: 2552 dots
Pixel clock frequency: 2.5 MHz

The input signal timing chart is shown below.

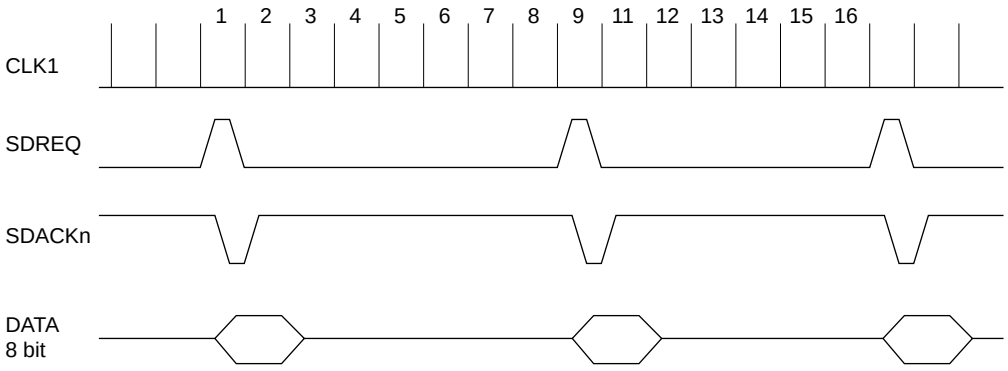



IOGA5
INT module
LINT
LINT
SCAN_IF
LINT generator circuit
Motor phase generator circuit
Slewing circuit
DREQ
DACK
LININT
External trigger generator
circuit (cycle counter)
General-purpose port
(R/W)
8-16 conversion
CPU
I/O port
DREQ
4
+5VS
+5V
PC1
PC2
S-MORTOR
DACK
+5V
-8V
+24 V
Contact image sensor
TRIG
SIG
PD0-7
8bit
LININT
SH
CLK1
Sensor drive
signal and motor
synchronizing
Sanyo LC82103
Controller
Register
Analog block
Filter block
Binary coding
block
Output
controller block
Distortion
correction block
Image area
separator
Half-tone
block
Binary image
reduction
processor
200MHz
Multivalue
image resolution
converter
Gamma
correction block
2K-bit SRAM
96K-bit DRAM
CPU BUS

(3) Image LSI Specifications

The analog image data from the image sensor is amplified about 4.3 times in the external non-reverse amplifier circuit and the amplified analog data is input to this LSI chip. In this LSI chip, the analog data is converted to digital data by the built-in A/D converter and the digital data is corrected by the internal correction function, thus sending binary-coded data to the IOGA5 every eighth pixel normally. When contrast is corrected, multi-valued data is sent for each pixel. When horizontal scanning lines are skipped, a request is suppressed every three requests. A sensor drive signal (CLK1) and motor synchronizing signal (SH) are output to the image sensor.

The timing of data transfer to/from the IOGA5 is shown below.



A3.1.4 JBIG Control

A3.1.4.1 Overview

JBIG control is performed by converting codes using the MN86064, a CODEC LSI chip that is fully compliant with ITU-T.85 (JBIG Facsimile Application). Major functions of the MN86064 are listed below. The system configuration is shown on the next page.

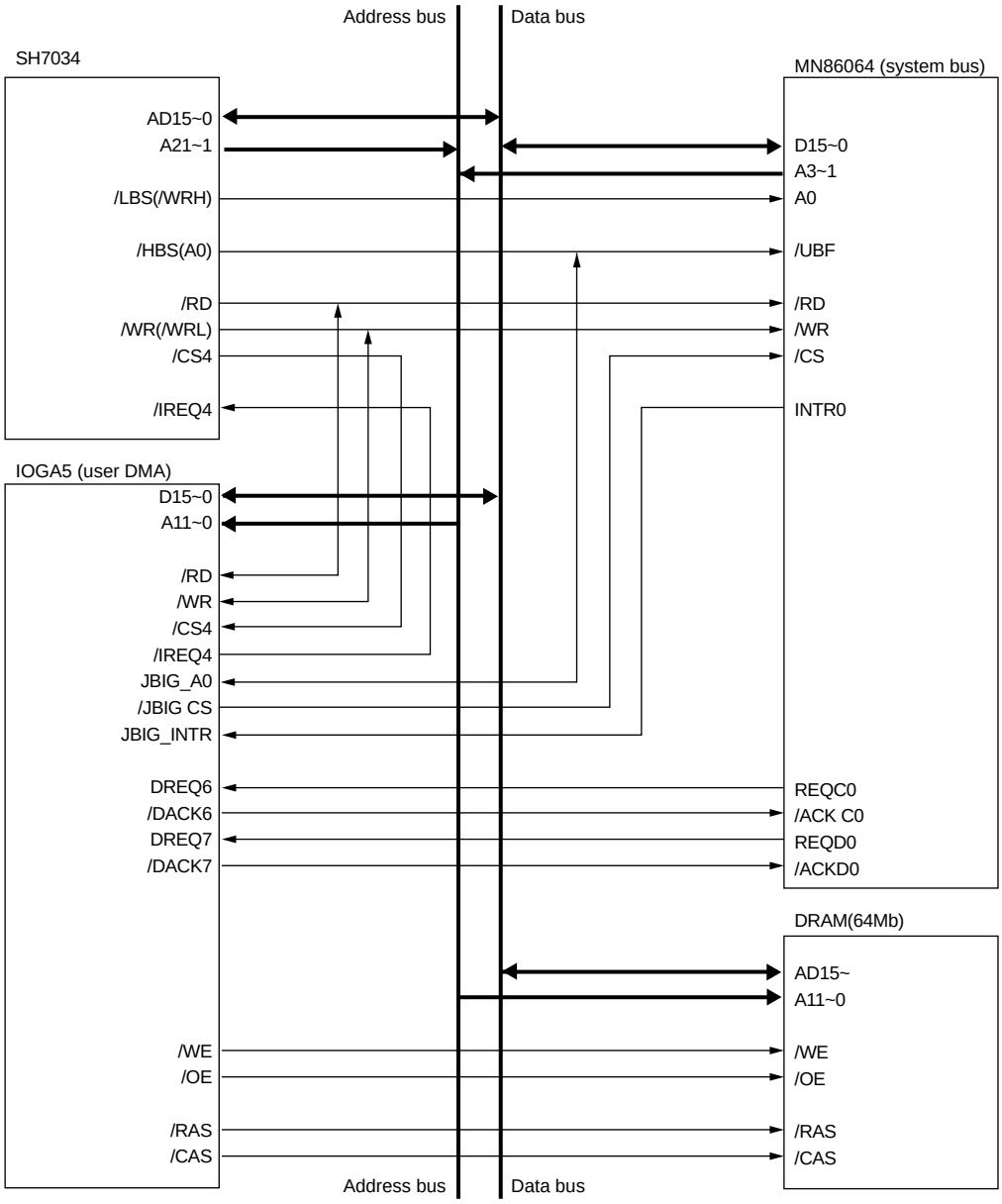
- Coding/decoding (MH, MR, MMR, JBIG)
- Code conversion (between different types of codes)
- Scaling (Horizontal scanning = 0.1% to 400%; Vertical scanning = 0.006% to 400%)
- Decoding error processing (leading line or white line)
- Both ends white masking
- Time-division multiplexing

A3.1.4.2 Code conversion

At the time of reception, JBIG codes are converted to image data in this LSI chip. At the time of transmission, image data is converted to MMR data and then this MMR data is converted to JBIG data in this LSI chip.

A3.1.4.3 CPU access

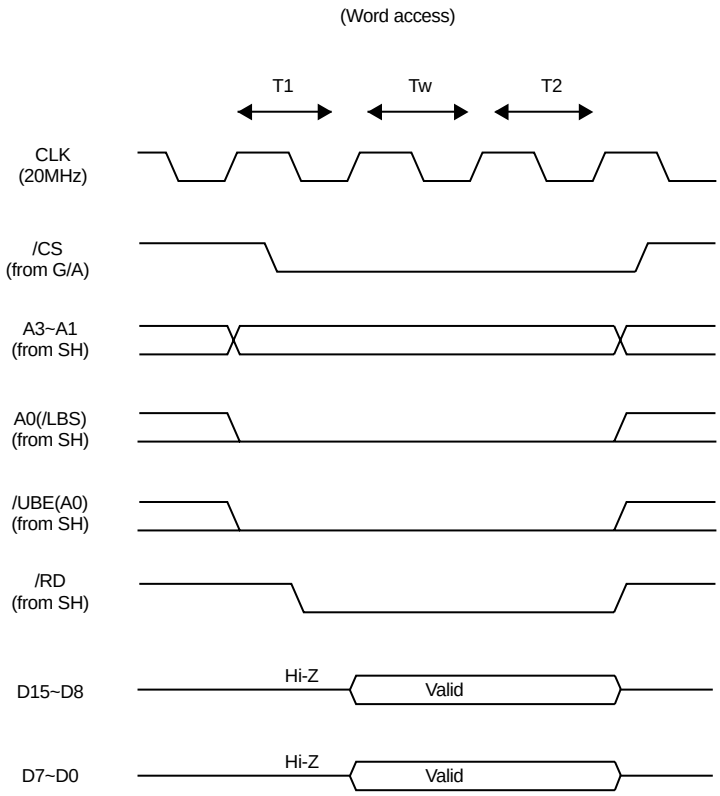
This LSI chip allows both 16-bit word access and 8-bit byte access. However, since this LSI has registers that allow only byte access, so it performs word access and byte access only in 16-bit spaces.
The CPU read (word access) timing chart is shown on the next page.



Note 1: JBIG_A0, /RD, and /WR of the IOGA5 are two-way pins.

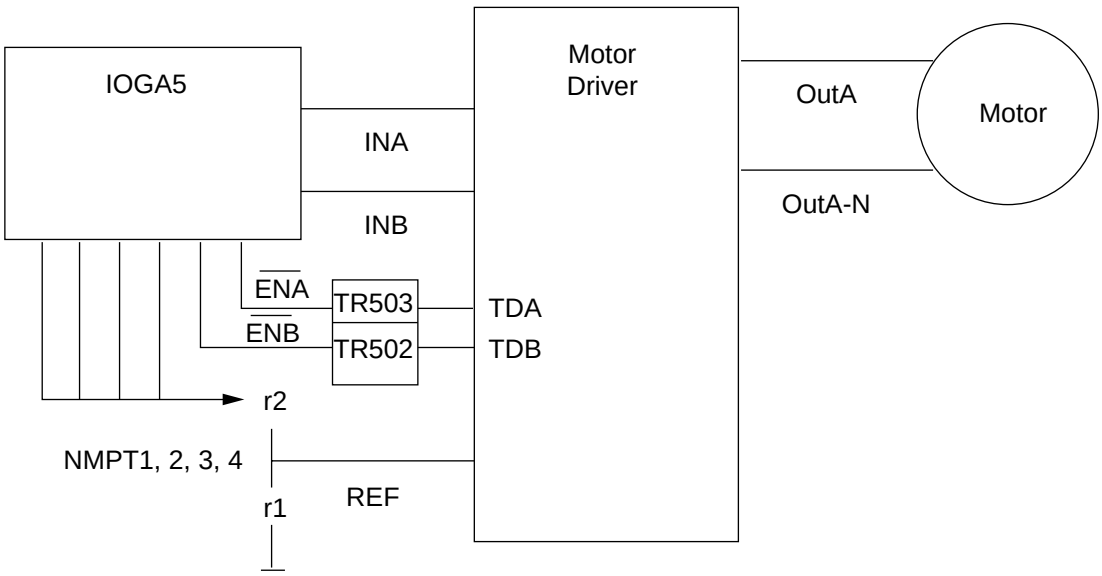
System Configuration

The CPU read (word access) timing chart is shown below.



A3.1.5 Scanner Motor Control

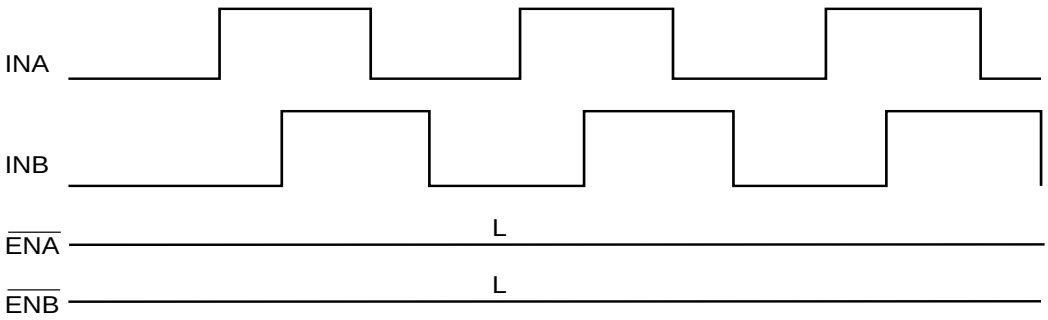
The overall control circuit diagram is shown below.



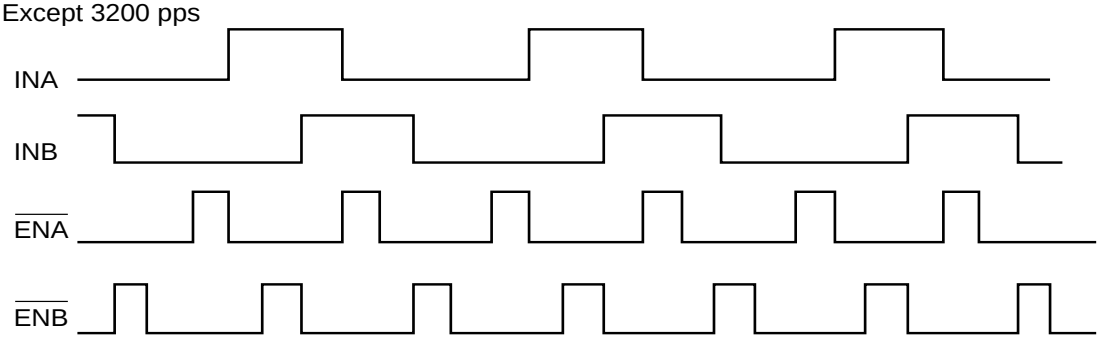
Rotation of the scanner motor is controlled by the INA, INB,$\overline{ENA}$ and $\overline{ENB}$ signals output from the LSI chip (IOGA5) on the MCNT board. MNPT 1, 2, 3, and 4 signals change the reference voltage signal REF to alter the current values of scanner drive signals OutA and OutA-N, controlling the motor speed.

Waveforms of motor drive signals INA, INB, $\overline{ENA}$ and $\overline{ENB}$ are as follows:

(1) For 3200 pps



(2) Except 3200 pps



A3.1.6 CPU Peripheral Circuits

A3.1.6.1 Memory

(1) DRAM
Size: 8 Mbytes (4 megabits x 16 bits; One chip)
Drive voltage: 3.3 V
The basic control signal is generated by the bus state controller incorporated in the CPU.

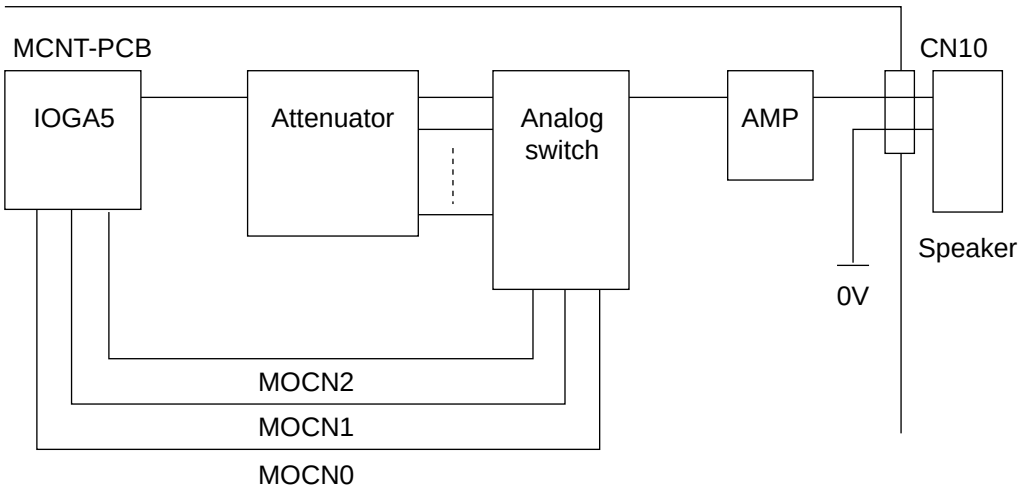
(2) Flash ROM
Size: 1.5 Mbytes (512K bits x 16 bits + 256K bits x 16 bits; A total of two chips)

A3.1.6.2 Peripheral elements

(1) Clock
A real-time clock IC (serial I/F) incorporating a crystal oscillator is used. Its basic frequency is 500 Hz. CPU pins 110 (RTCTXD), 109 (RTCDATA), and 112 (RTCCLK) are used as I/F signal pins. The drive voltage is 3 V and backed up by a dedicated lithium battery.

(2) Speaker drive circuit
A tone switching output board is used to switch between the 2441 Hz waveforms output from the LSI chip (IOGA5), issuing various buzzer sounds, key touch sound, ringing tone and line monitor sounds.

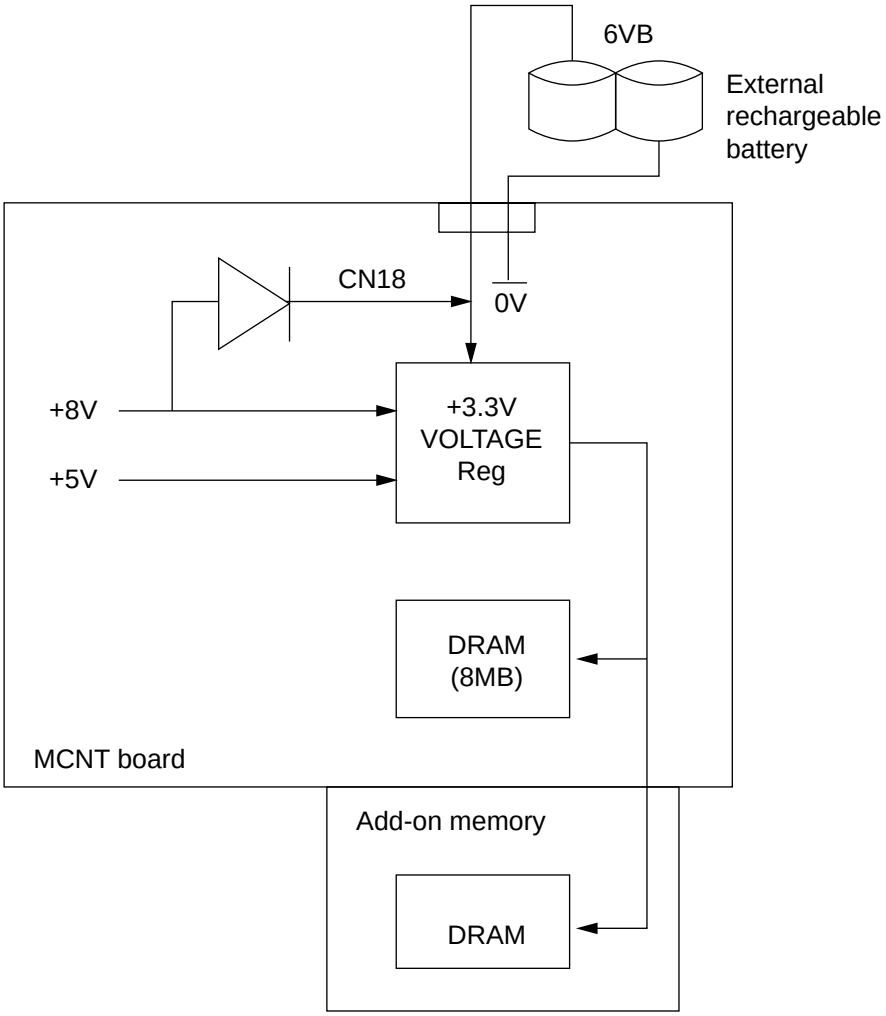
A block diagram is shown below.



A3.1.6.3 Backup circuit

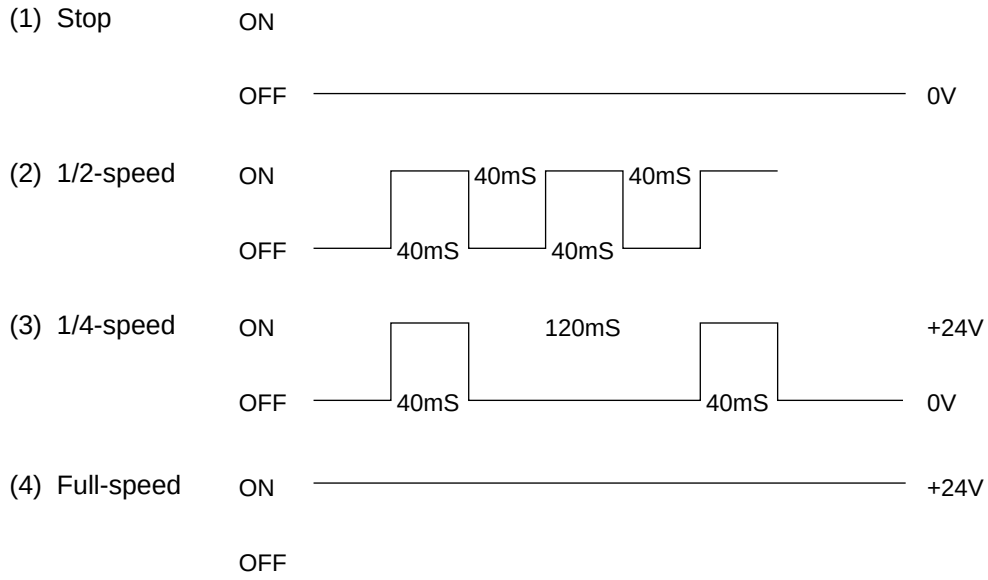
A rechargeable battery connected to the MCNT board externally supplies 6 V to the IC inside the MCNT board. This voltage is reduced to 3.3 V to be supplied to the DRAM and optional add-on memory. Thus, send/received data stored in the DRAM and optional add-on memory can be retained after power-off.
When the power is turned on, the internal IC reduces the +8 V and +5 V supplied from low-voltage power supplies down to 3.3 V, which is supplied to the DRAM. At the same time, +8 V is supplied to the external battery for recharging.

A block diagram is shown below.



A3.1.6.4 Fan control

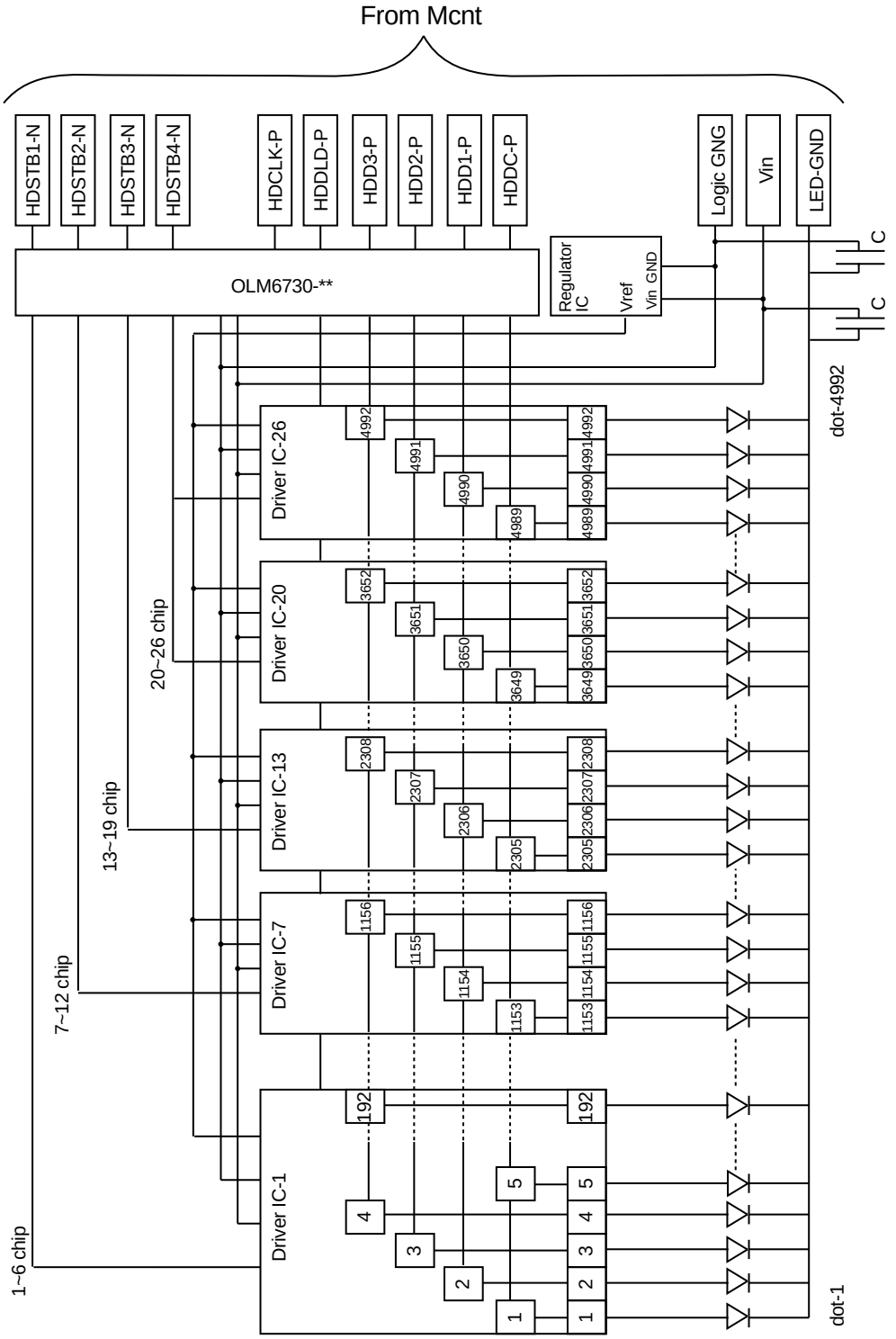
One of the following fan control modes is selected depending on the heater temperature and system status.



To detect fan errors, the fan sensor (FANALM-P) is monitored in the full speed mode. The fan sensor is not monitored for 3 seconds after the start of full speed operation taking into account the fan sensor output determination time.
The fan sensor is not monitored when the fan is rotating at 1/2 or 1/4 speed or it is at halt.

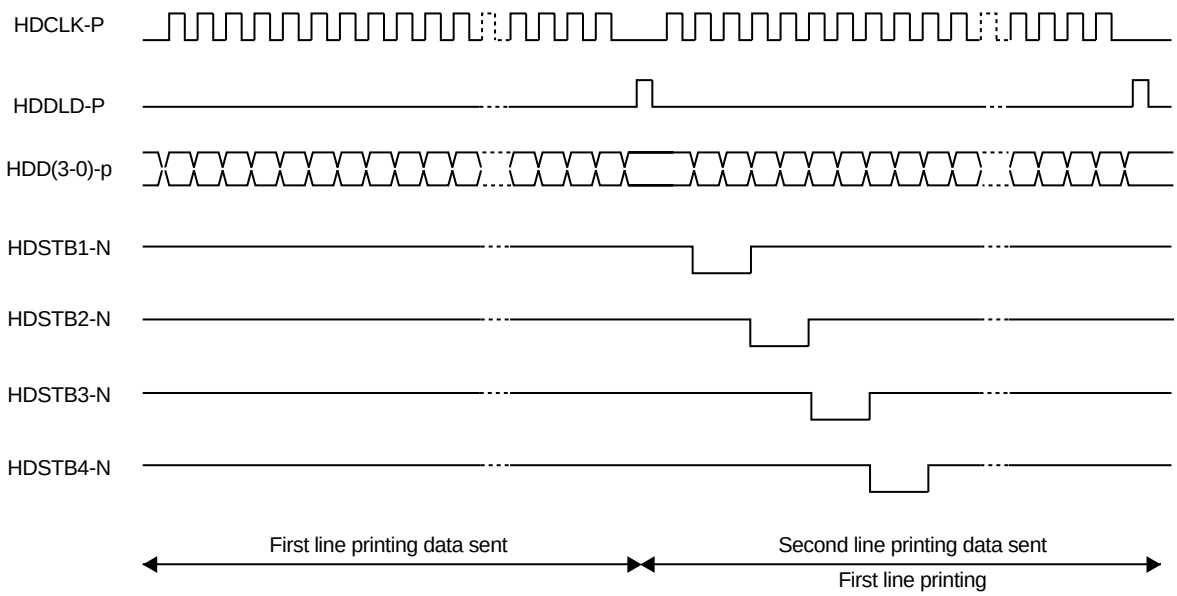
A3.1.7 LED Head Control

The IOGA5 on the MCNT board transfers image data to the LED head. After receiving the image data, the LED head illuminates in the next line cycle, exposing the drum. The head's internal block diagram is shown below. The timing charge is shown on the next page.



Head's Internal Block Diagram

Normal Mode Printing Timing Chart



A3.1.8 Heater Control

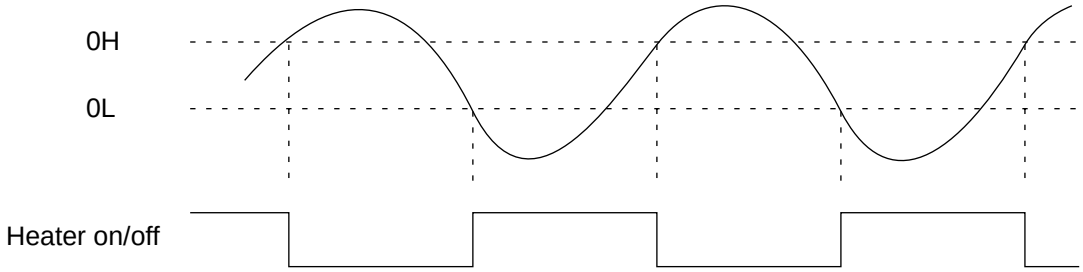
The heater temperature is controlled based on the 8-bit digital data obtained by performing serial communication with the high-voltage power supply unit taking into account the system status, paper size, paper source, and setting menu.

This system drives the drum motor and resist motor to feed paper before the fusing temperature is reached, thus starting printing as soon as possible after call termination.

If fusing is started immediately after the fusing temperature is reached, paper is liable to be wrinkled because of an overshoot.

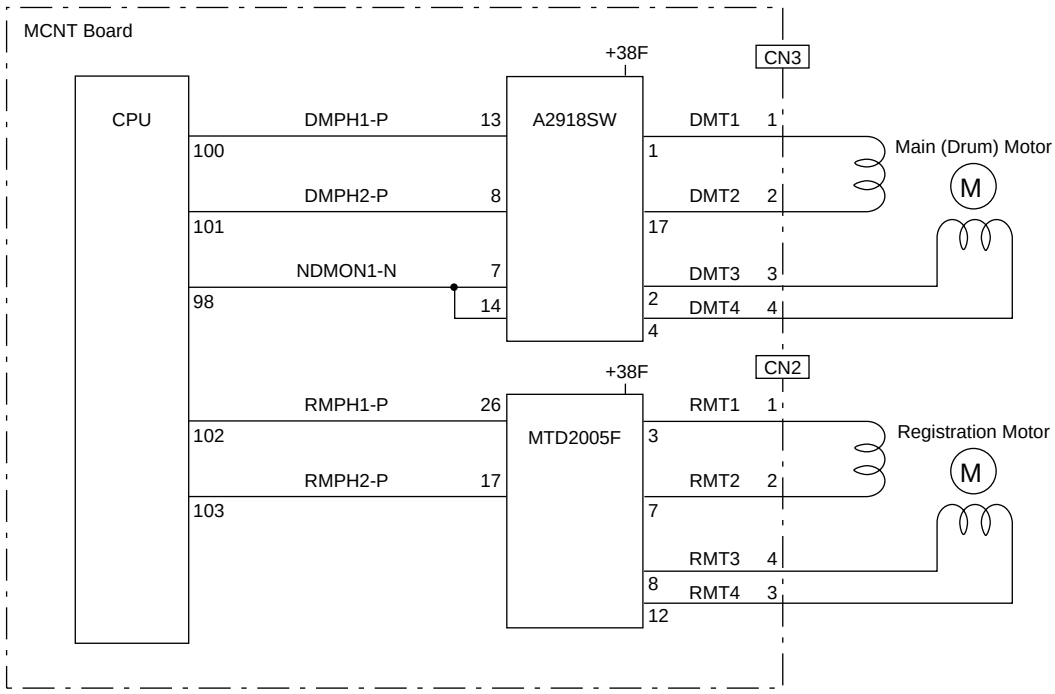
To prevent this, fusing on the first sheet is started at a temperature lower than the normal fusing temperature.

If an attempt is made to turn on/off the heater at an AD conversion value to maintain the temperature at a certain level, the heater may be turned on and off repeatedly due to AD conversion accuracy or noise, overloading the halogen lamp. To prevent this, the temperature at which the heater is turned on is separated far from the temperature at which the heater is turned off.

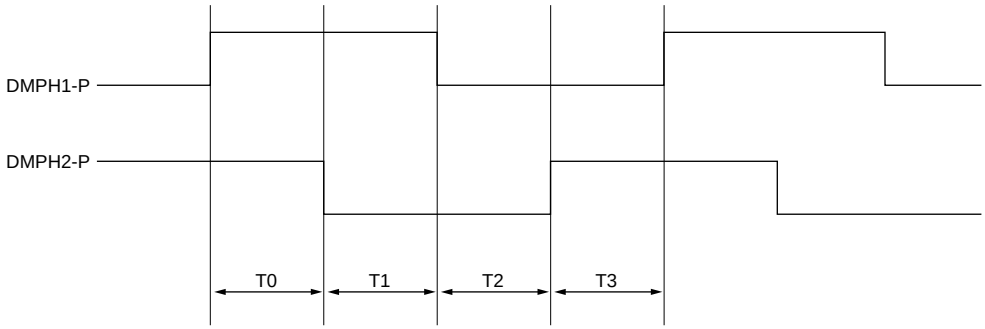


A3.1.9 Printer Motor Control

(1) Registration and main (drum) motors
A registration motor and a drum motor are driven by means of control signals from the CPU and a driver IC.

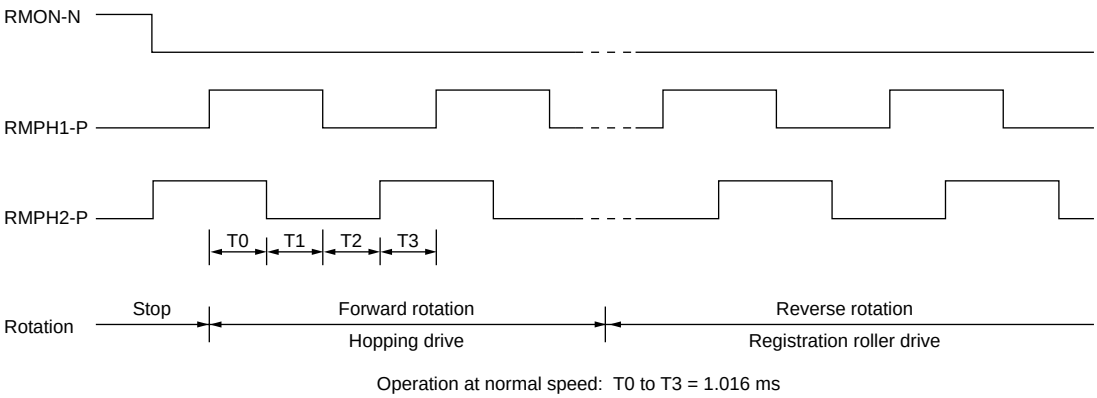


(2) Drum motor



Operation at normal speed: T0 to T3=1.016 ms

(3) Registration motor



Operation at normal speed: T0 to T3 = 1.016 ms

(4) Drive control

Time T0 to T3 determines the motor speed, while the difference of phase direction between phase signals DMPH1-P and DMPH2-P (RMPH1-P and RMHPH2-P) determines the rotation direction, DMON1-N signals control a motor coil current. According to the polarity of the phase signal, the coil current flow as follows:

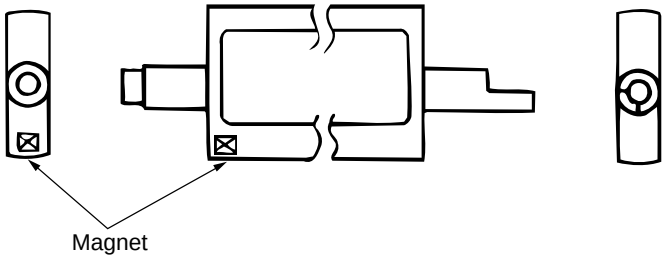
1) +38V $\rightarrow$ SW $\rightarrow$ motor coil $\rightarrow$ $\overline{\text{SW}}$ $\rightarrow$ resistor $\rightarrow$ earth, or,

2) +38V $\rightarrow$ $\overline{\text{SW}}$ $\rightarrow$ motor coil $\rightarrow$ SW $\rightarrow$ resistor $\rightarrow$ earth

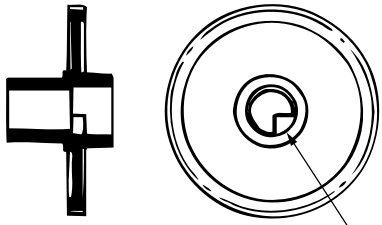
The voltage drop across the reisistor is input to comparator, where it is compared with a reference voltage. If an overcurrent flow occurs, a limiter operates to maintain it within a certain fixed amount of current.

A3.1.10 Toner Low Detection

• Device
The Toner Low Detection device consists of a stirring gear which rotates at a constant rate, a stiring bar and a magnet on the stirring bar. The stirring bar rotation is driven by the link to the gouged portion in the stirring gear.



Stirring Bar



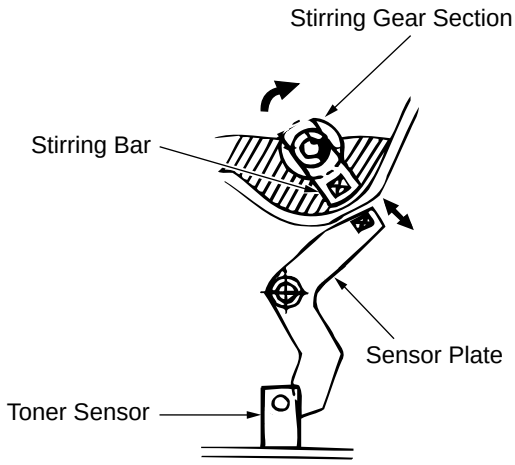
Stirring Gear

• Operation
Toner Low is detected by monitoring the time interval of the encounter of the magnet set on the sensor plate and the magnet on the stirring bar.

Operation during Toner Full state

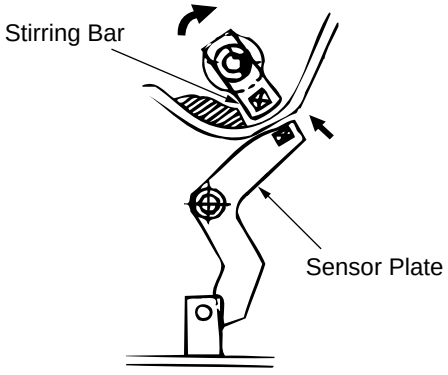
• The stirring bar rotates due to the mechanical transmission of energy originating from the interlocking with the stirring gear.

• Even when the magnet on the stirring bar reaches the maximum height, the stirring bar is pushed by the stirring gear, since the other side is being dipped in the toner.

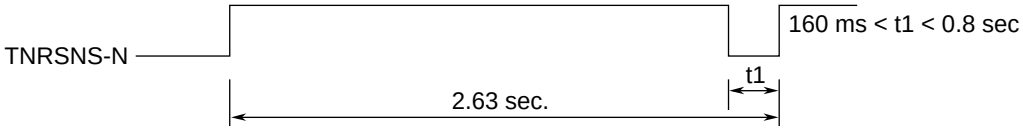


Operation during Toner Low state

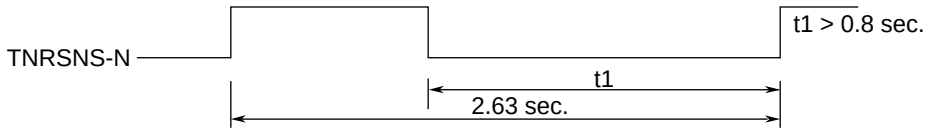
• When the stirring bar reaches the maximum height, it falls to the minimum height due to its own weight, since there is no resistance provided by the toner on the other side. Because of this, the time interval during which it is in encounter with the magnet of the sensor plate becomes longer. By monitoring this time interval, Toner Low state can be detected.



TONER FULL state



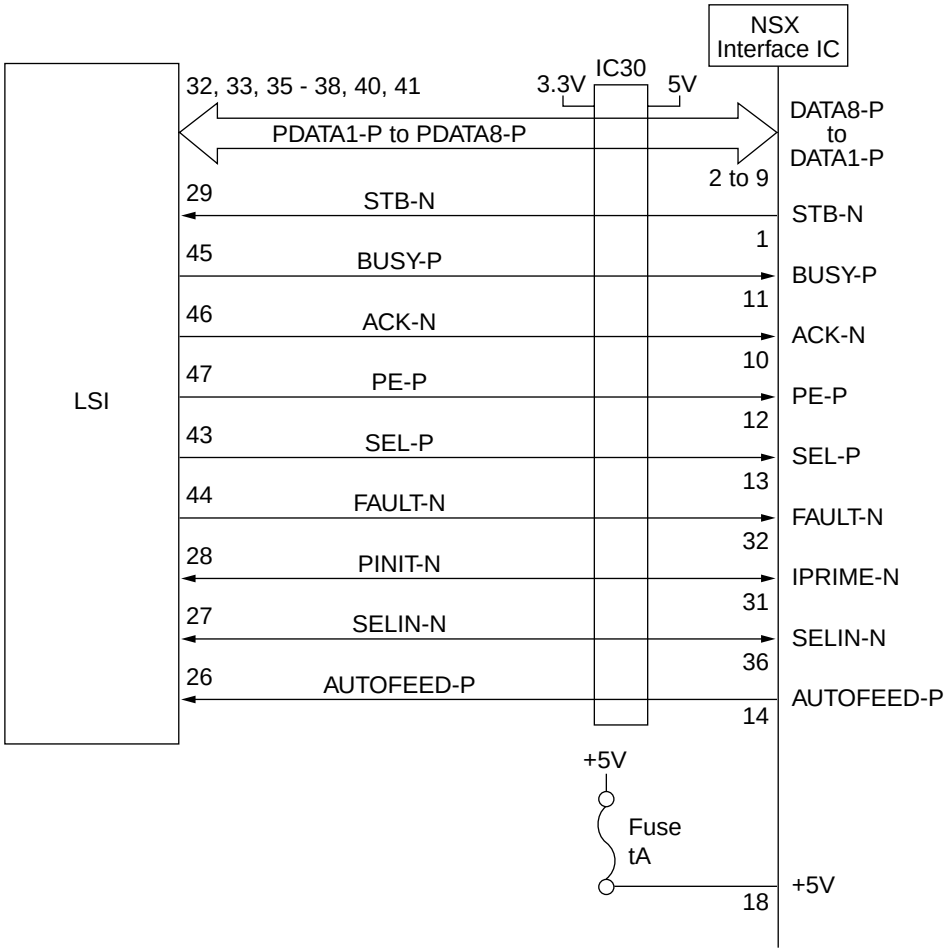
TONER LOW state

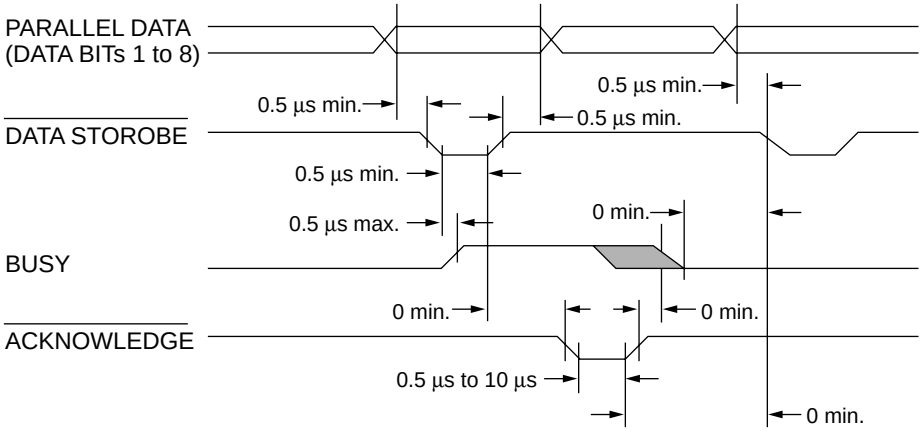


- When the Toner Low state is detected 2 times consecutively, Toner Low is established.
- When the Toner Full state is detected 2 times consecutively, Toner Low is cancelled.
- When there is no change with the toner sensor for 2 cycles (2.63 sec. x 2) or more, then the Toner Sensor Alarm is activated.
- The toner sensor is not monitored while the main (drum) motor is in a halt.

A3.1.11 Centronics Parallel Interface

The LSI sets a BUSY-P signal to ON at the same time when it reads the parallel data (PDATA1-P to PDATA8-P) from the parallel port at the fall of STB-N signal. Furthermore, it makes the store processing of receiving data into a receive buffer terminate within a certain fixed time and outputs an ACK-N signal, setting the BUSY-P signal to OFF.





A3.1.12 Electrophotographic Process

The electrophotographic processing is outlined below. The electrophotographic printing process is shown in Figure 2-4.

① Charging
The surface of the image drum is charged uniformly with a negative charge by applying the negative voltage to the charge roller.

② Exposure
Light emitted from the LED head irradiates the negatively charged surface of the image drum. The surface potential of the irradiated portion of the image drum surface becomes lower, forming the electrostatic latent image associated with the print image.

③ Developing and toner recovery
When the negatively charged toner is brought into contact with the image drum, it is attracted to the electrostatic latent image by static electricity, making the image visible.

At the same time, the residual toner on the image drum is attracted to the developing roller by static electricity.

④ Transfer
When paper is placed over the image drum surface, the positive charge which is opposite is polarity to that of the toner, is applied to the reverse side of the paper by the transfer roller. The toner is attracted by the positive charge and is transferred onto the paper. This results in the transfer of the toner image formed on the image drum onto the paper.

⑤ Temporary cleaning
Residual toner which remains on the image drum without being transferred is evened out by the cleaning roller and is temporarily attracted to the cleaning roller by static electricity.

⑥ Fusing
The toner image transferred onto the paper is fused to the paper by heat and pressure.

An electrophotographic process timing chart is shown in Figure 2-5.

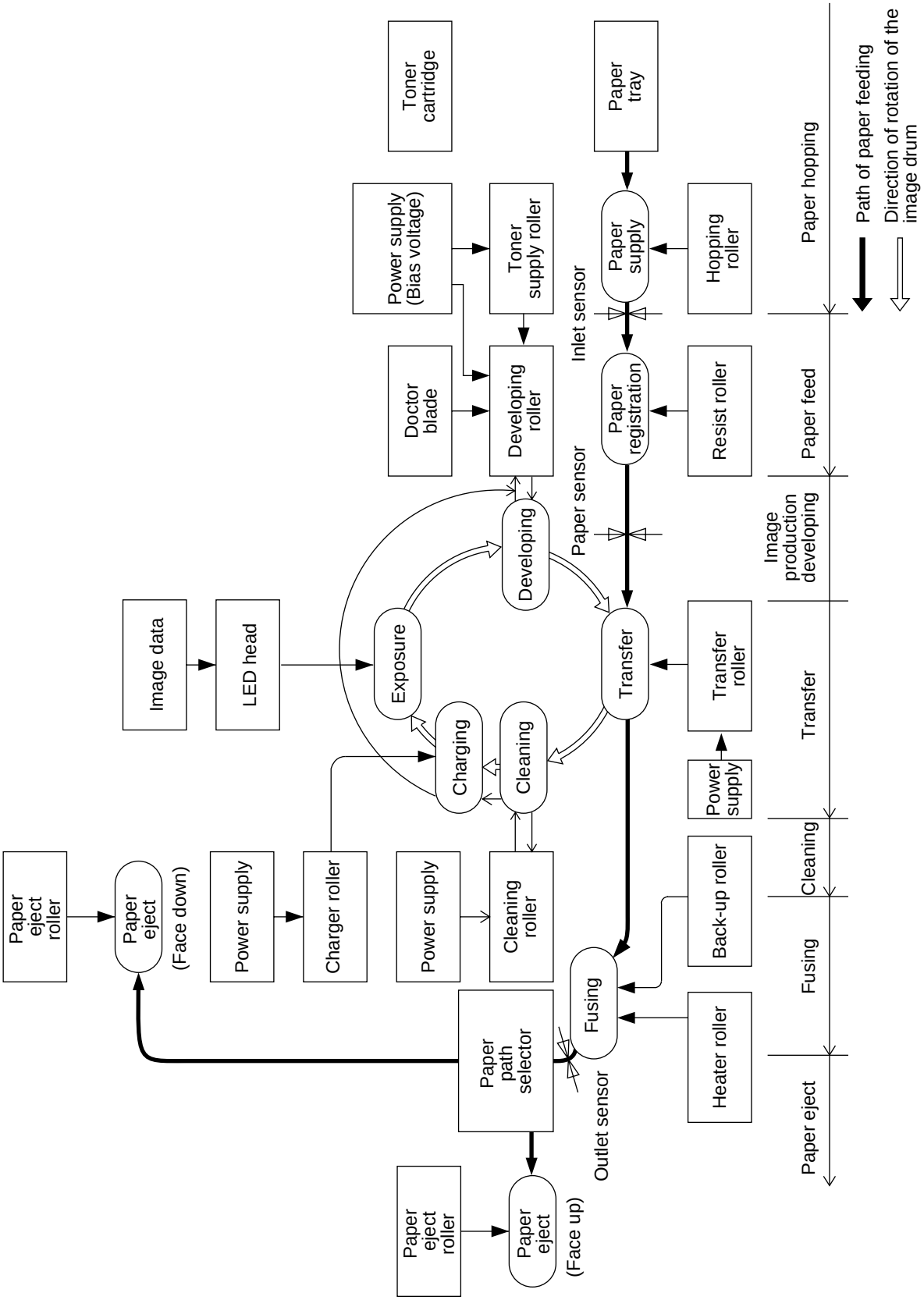

Toner cartridge
Paper tray
Power supply (Bias voltage)
Toner supply roller
Paper supply
Hopping roller
Doctor blade
Developing roller
Inlet sensor
Paper registration
Resist roller
Paper sensor
Image data
LED head
Exposure
Developing
Transfer
Transfer roller
Charging
Cleaning
Power supply
Paper eject roller
Paper eject
(Face down)
Power supply
Charger roller
Power supply
Cleaning roller
Back-up roller
Fusing
Paper path selector
Heater roller
Outlet sensor
Paper eject roller
Paper eject
(Face up)
Paper hopping
Paper feed
Image production developing
Transfer
Cleaning
Fusing
Paper eject
Path of paper feeding
Direction of rotation of the image drum

Fig. 2-4

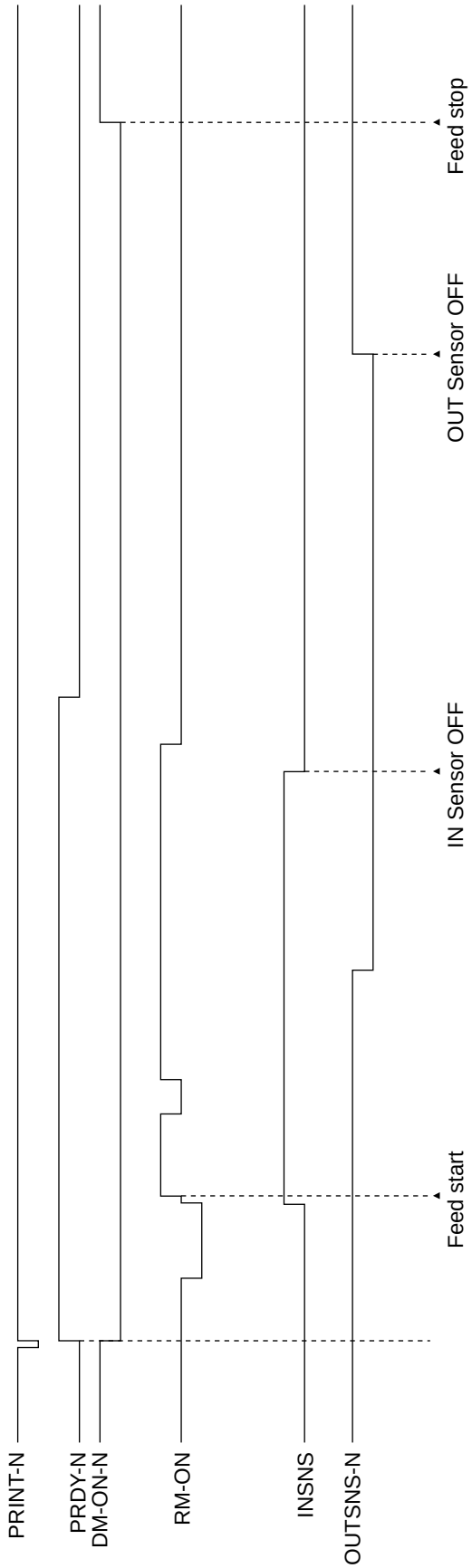
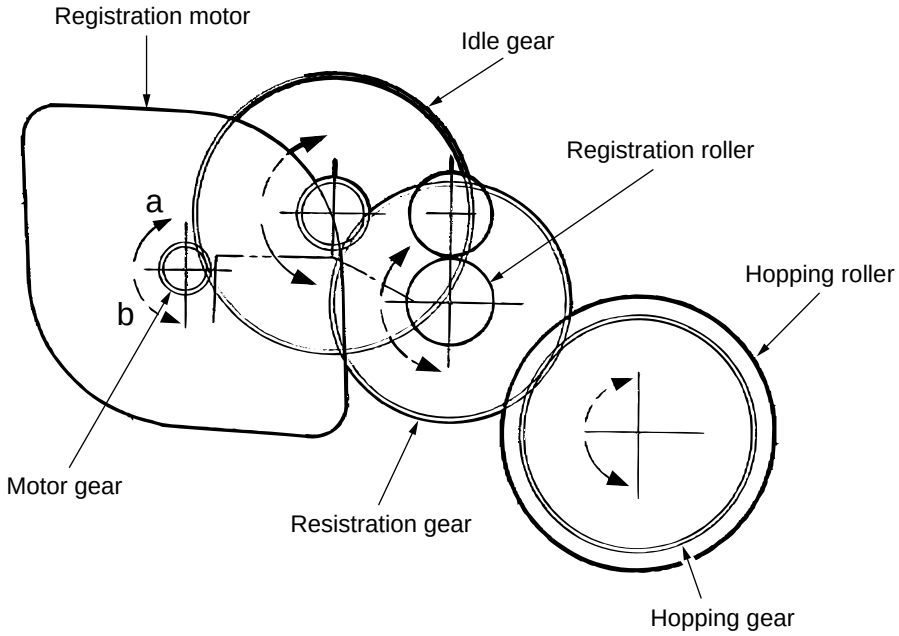

PRINT-N
PRDY-N
DM-ON-N
RM-ON
INSNS
OUTSNS-N
Feed start
IN Sensor OFF
OUT Sensor OFF
Feed stop

Fig. 2-5

A3.1.12.1 Process Operation Descriptions

(1) Hopping and Feeding
Hopping and feeding motions are actuated by a single registration motor in the mechanism as shown below:

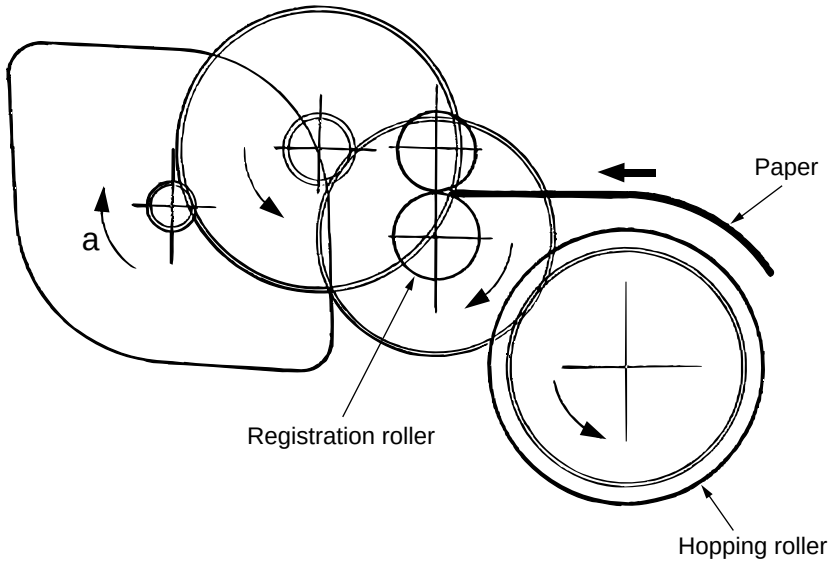


The registration motor turning in direction "a" drives the nopping roller. The registration motor turning in direction "b" drives the registration roller. The registration and hopping gears have one-way bearing, so turning any of these gears in the reverse direction will not transmit the motion to the corresponding roller.

(a) Hopping

① For hopping, the registration motor turns in direction "a" (clockwise direction) and drives the hopping roller to advance the paper until the inlet sensor turns on (in this case, the registration gear also turns, but the registration roller is prevented from turning by the one-way bearing.)

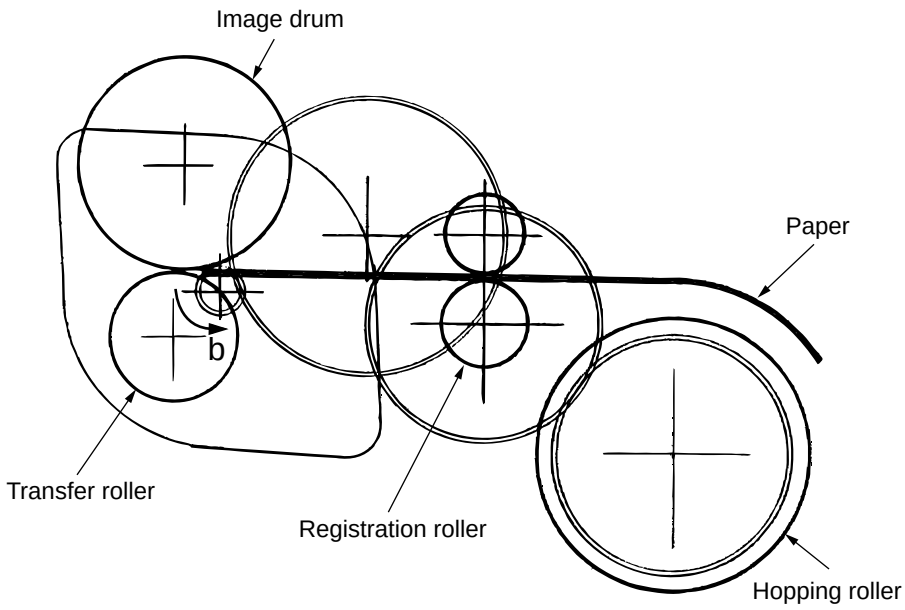
② After inlet sensor is turned on by the paper advence, the paper is further advanced to a predetermined distance until the paper hits the registration roller (the skew of the paper can thus be corrected.)



(b) Feeding

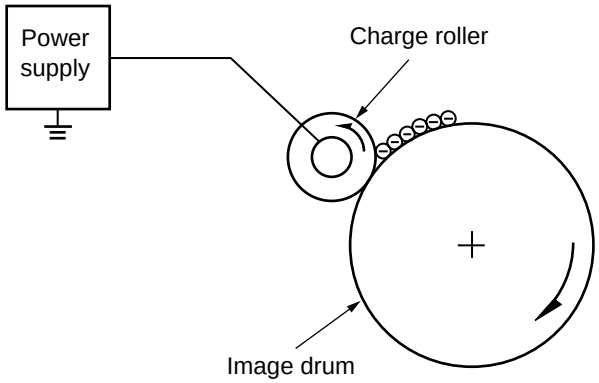
① When hopping is completed, the registration motor turning in direction "b" (counter-clockwise direction) drives the registration roller to advance the paper (in this case, the hopping gear also turns, but the hopping roller is prevented from turning by the one-way bearing.)

② The paper is further advanced in synchronization with the print data.

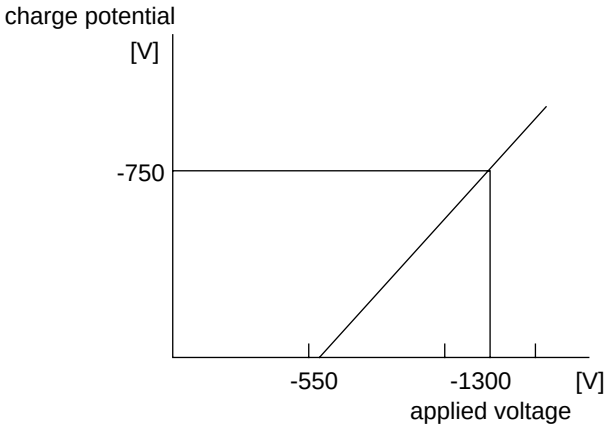


(2) Charging

Charging is actuated by appliciation of the DC voltage to the charge roller thta is in contact with the image drum surface.

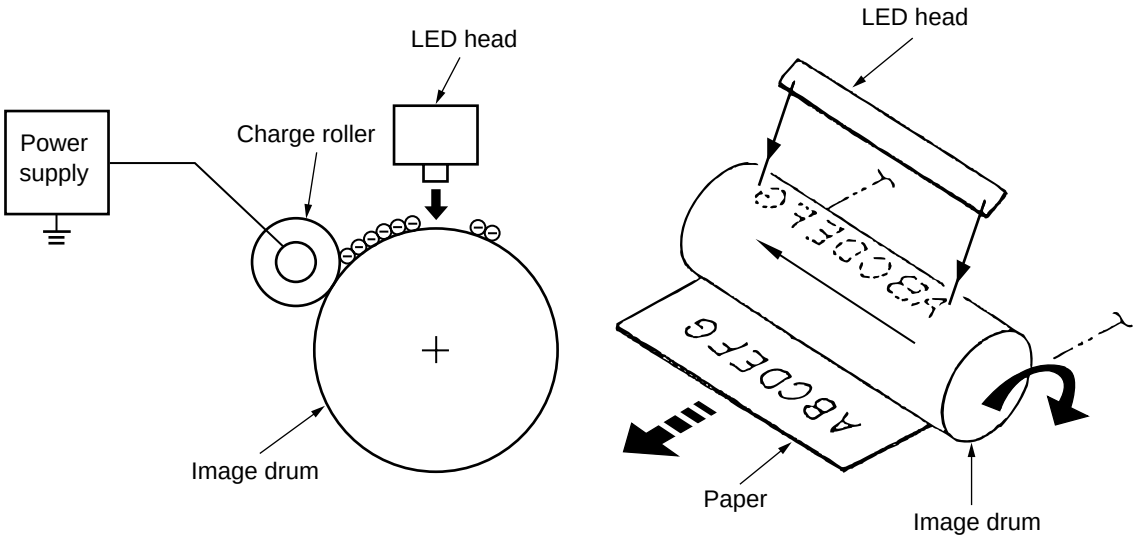


The charge roller is composed of two layers, a conductive layer and a surface protective layer, both having elasticity to secure good contact with the image drum. When the DC voltage applied by the power supply exceeds the threshold value, charging begins. The applied voltage is proportional to the charge potential, with offset of approximately -550V.

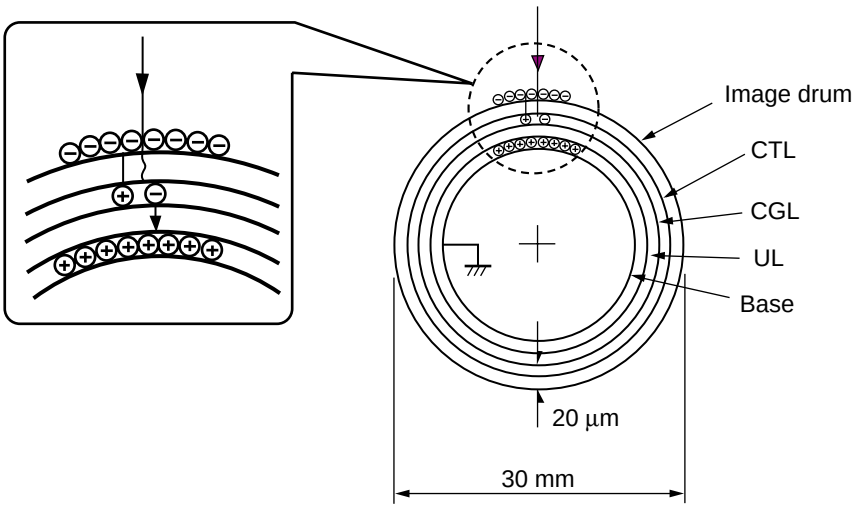


(3) Exposure

Light emitted by the LED head irradiates the image drum surface with a negative charge. The surface potential of the irradiated portion of the image drum drops, forming an electrostatic latent image associated with the image signal.



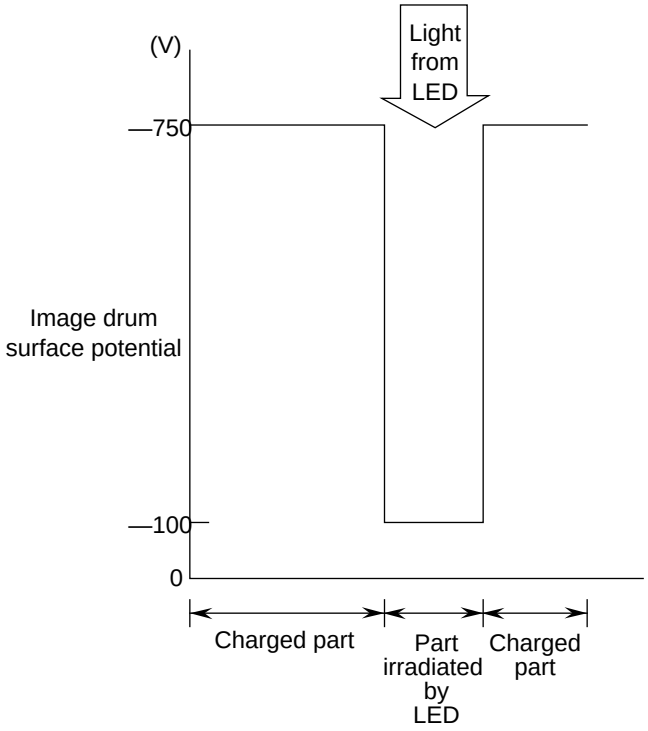
The image drum is coated with an underlayer (UL), a carrier generation layer (CGL), and carrier transfer layer (CTL) on aluminum base. The organic photo conductor layer (OPC), comprising a CTL and a CGL, is about 20 mm thick.



The image drum surface is charged to about -750 V by the contact charge of the charge roller.

When the light from the LED head irradiates the image drum surface, the light energy generates positive and negative carriers in the CGL. The positive carriers are moved to the CTL by an electrical field acting on the image drum. Likewise, the negative carriers flow into the aluminum layer (ground).

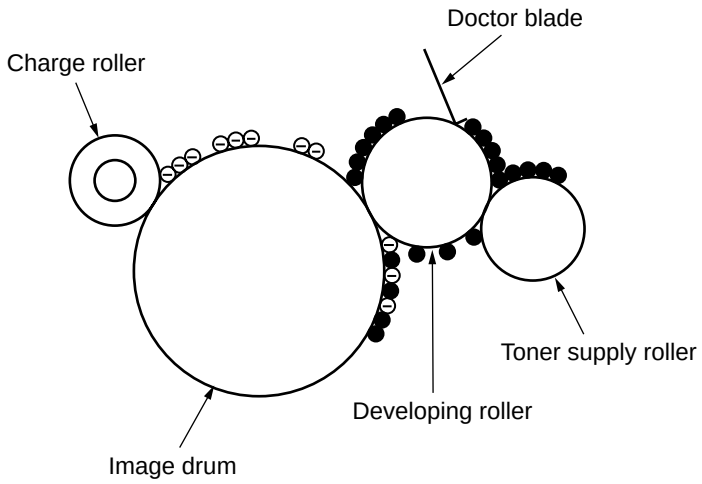
The positive carriers moved to the CTL combine with the negative charges on the image drum surface accumulated by the contact charge of the charge roller, lowering the potential on the image drum surface. The resultant drop in the potential of the irradiated portion of the image drum surface forms an electrostatic latent image on it. The irradiated portion of the image drum surface is kept to about -100 V.



(4) Developing

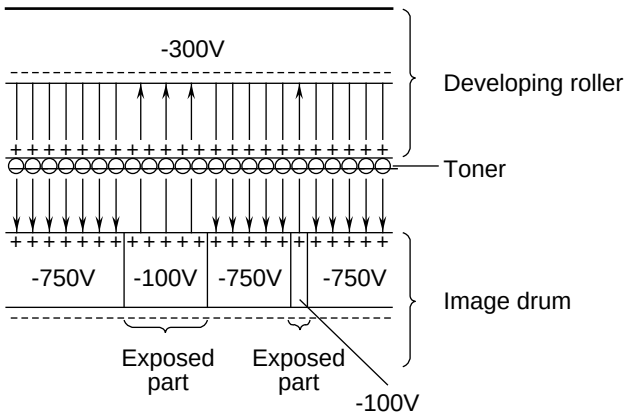
Toner is attracted to the electrostatic latent image on the image drum surface, converting it into a visible toner image. Developing takes place through the contact between the image drum and the developing roller.

① As the toner supply roller rotates while rubbing on the developing roller, a friction charge is generated between the developing roller and the toner, allowing the toner to be attracted to the developing roller (the developing roller surface is charged positive and the toner, negative.)



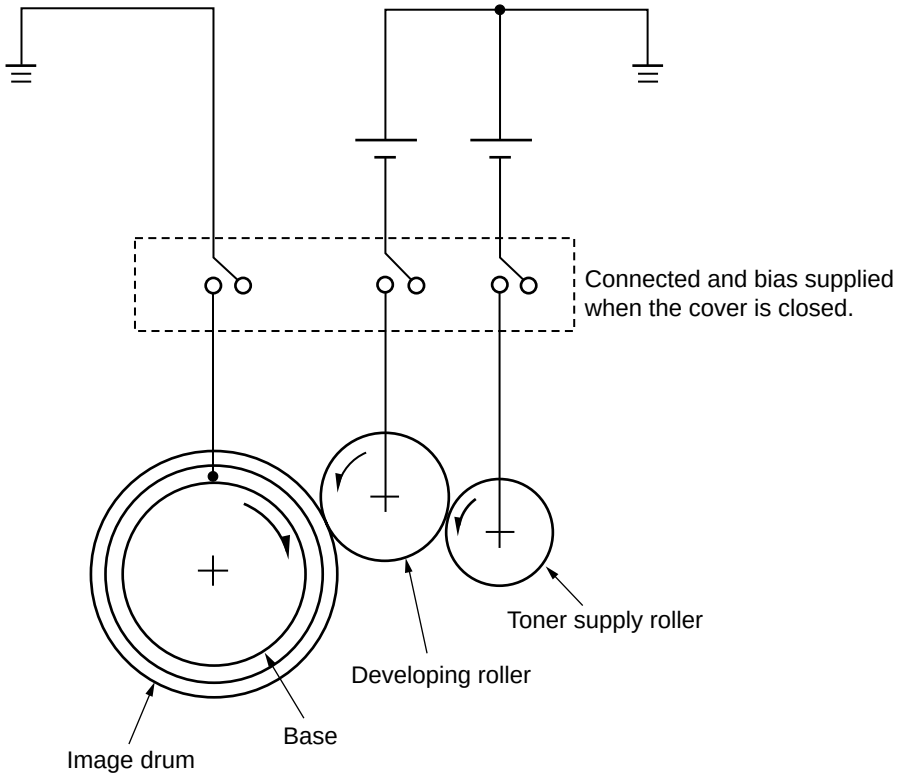
② The toner attracted to the developing roller is scraped off by the doctor blade, forming a thin coat of toner on the developing roller surface.

③ Toner is attracted to the exposed portion (low-potential part) of the image drum at the contact of the image drum and the developing roller, making the electrostatic latent image visible.



An illustration of activities at the contact point of the image drum surface and the developing roller (arrow marks denote the direction of the electrical field).

Note: The bias voltage required during the developing process is supplied to the toner supply roller and the developing roller, as shown below. -500 VDC is supplied to the toner supply roller, -265 VDC to the developing roller.

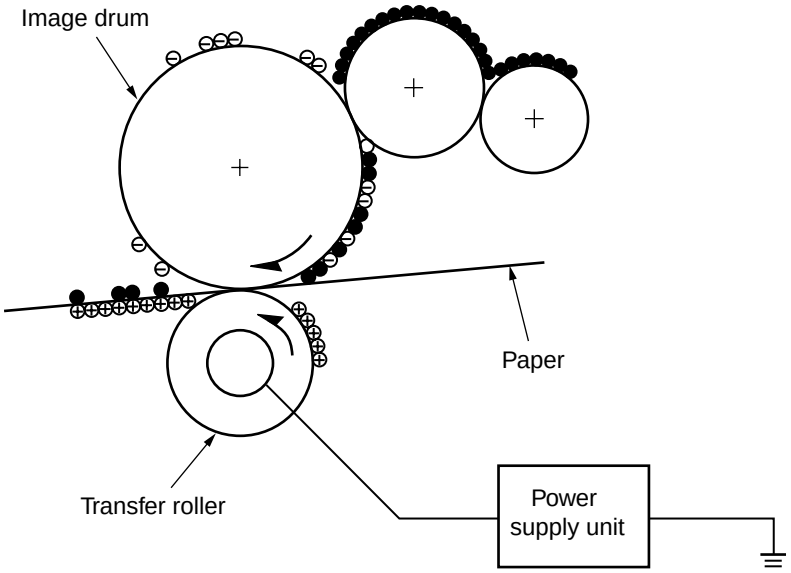


(5) Transfer

The transfer roller is composed of conductive sponge material, and is designed to get the image drum surface and the paper in a close contact.

Paper is placed over the image drum surface, and the positive charge, opposite in polarity to that of the toner, is applied to the paper from the reverse side.

The application of a high positive voltage the from the power supply to the transfer roller causes the positive charge inducement on the transfer roller surface, transferring the charge to the paper as it contacts the transfer roller. The toner with negative charge is attracted to the image drum surface, and it is transferred to the upper side of the paper due to the positive charge on the reverse side of the paper.

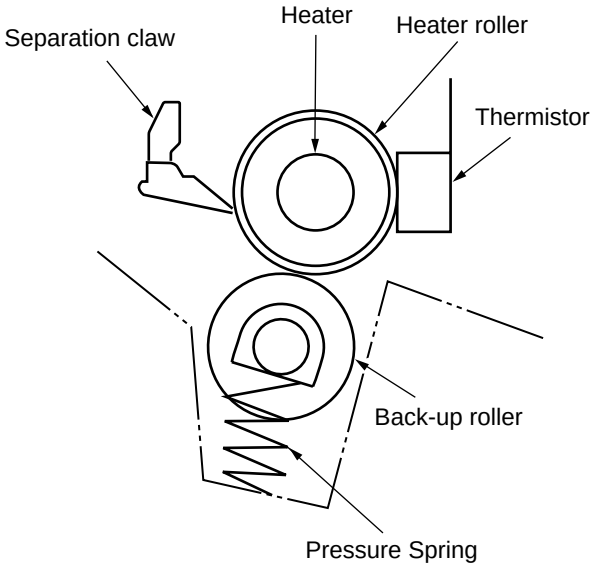


(6) Fusing

After the end of the transfer operation, the unfused toner image is fused on the paper under heat and pressure as it passes between the heater roller and the back-up roller. The heater roller with a Teflon coating incorporates a 500 W heater (Halogen lamp), which heats the heat roller.

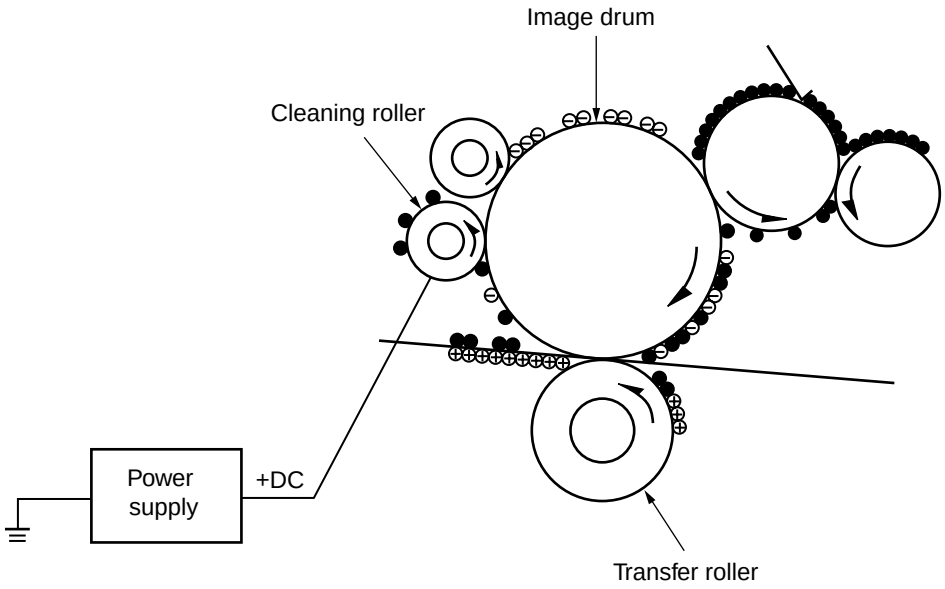
A thermister, which is in contact with the heater roller regulates the heater roller at a predetermined temperature (about 185 ˚C for OKIFAX 5000 series). A safety thermostat cuts off voltage supply to the heater by opening the thermostat in the event of abnormal rise in temperature.

The back-up roller is held under a pressure of 3.76 kg applied by the pressure spring on each side.



(7) Cleaning

When the transfer is completed, the residual toner left on the image drum is attracted to the cleaning roller temporarily by static electricity, and the image drum surface is cleaned.



(8) Cleaning of rollers

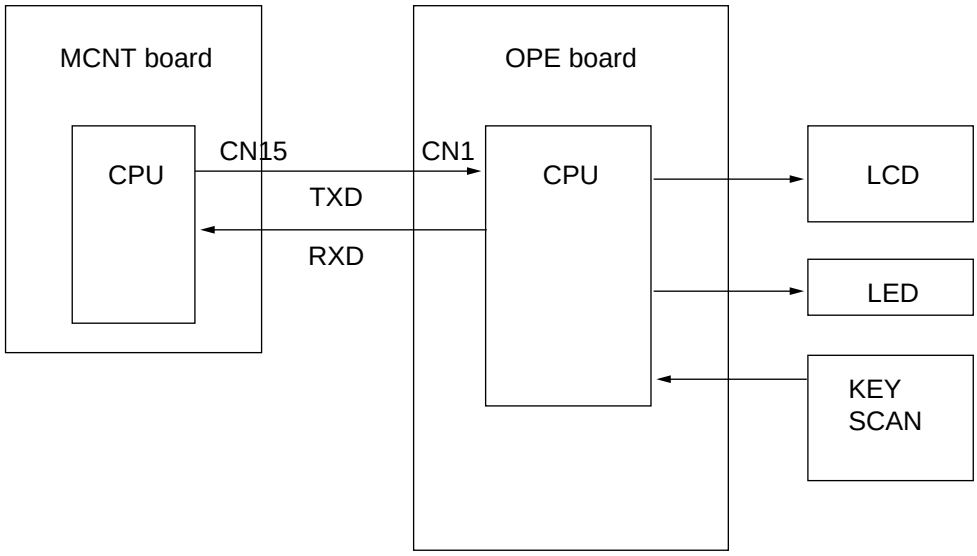
The charge, transfer and cleaning rollers are cleaned for the following cases:

- Warning up when the power is turned on.
- Warning up after the opening and closing of the cover.
- When the number of sheets accumulated reaches 10 or more, and the printout operation ends.

Changes in bias voltage applied to each roller move attaching toner off the roller to the image drum and return it to the developer.

A3.2 OPE Control

The rough block diagram of the OPE panel is shown below.



Host Interface

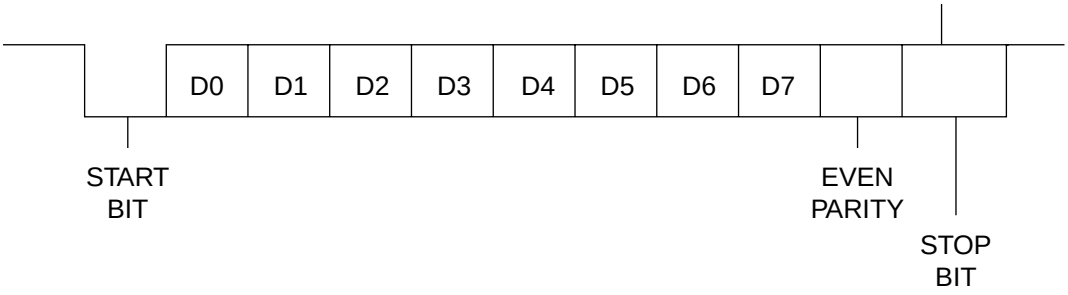
Between the MCNT and OPE, serial data is transferred via the SIO incorporated in the CPU.

<Communication method>

1) Communication method: Start-stop synchronization
2) Transfer rate: 5832 bps
3) Data length: 8 bits

<Data configuration>

1) Status bit: 1 bit
2) Data: 8 bits
3) Even parity: 1 bit (ignored by OPE)
4) Stop bits: Bits 1 and 5
   Error = ±5%

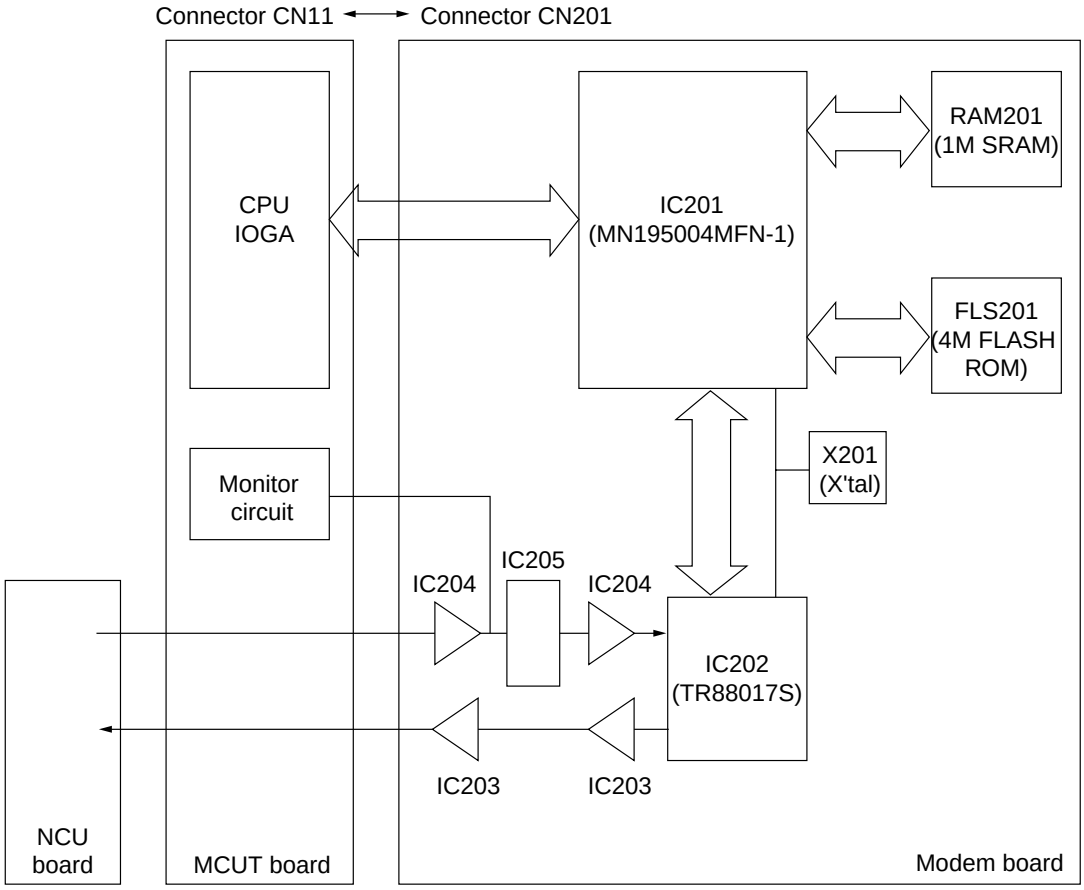


A3.3 MODEM K34 Board

Functional Overview

- ITU-T V.34 half-duplex transmission/reception (for image data)
- ITU-T V.33/V.17 transmission/reception (for image data)
- ITU-T V.29 transmission/reception (for image data)
- ITU-T V.27ter transmission/reception (for image data)
- ITU-T V.21 30-bps transmission/reception (for handshaking procedure)
- ITU-T V.8 transmission/reception (for V.34 negotiation procedure)
- HDLC framing
- Single tone issue/detection (CNG signal, CED signal, etc.)
- Dial tone/busy tone detection
- DTMF signal issue/detection
- Pseudo ring back tone
- Automatic gain control
- Amplifier
- A/D and D/A converters

Block diagram



LSI, IC, and Memory

• X201 (Crystal)
 * Crystal oscillator: 24.5760 MHz

• IC201 (MN195004MFN-1)(Modem data pump)
 This LSI provides an interface with the host CPU. It is the heart of the modem. It consists of digital signal processing circuits.

• IC202 (TR88017S) (Analog front end)
 An analog front end LSI that provides an interface between the line controller and the MN195004. It consists of analog circuits. It has two channels of 16-bit A/D and D/A converters.

• FLS201 (4MFASH memory)
 A memory for storing the MN195004MFN-1 program. * This program cannot be loaded by the PC loading method.

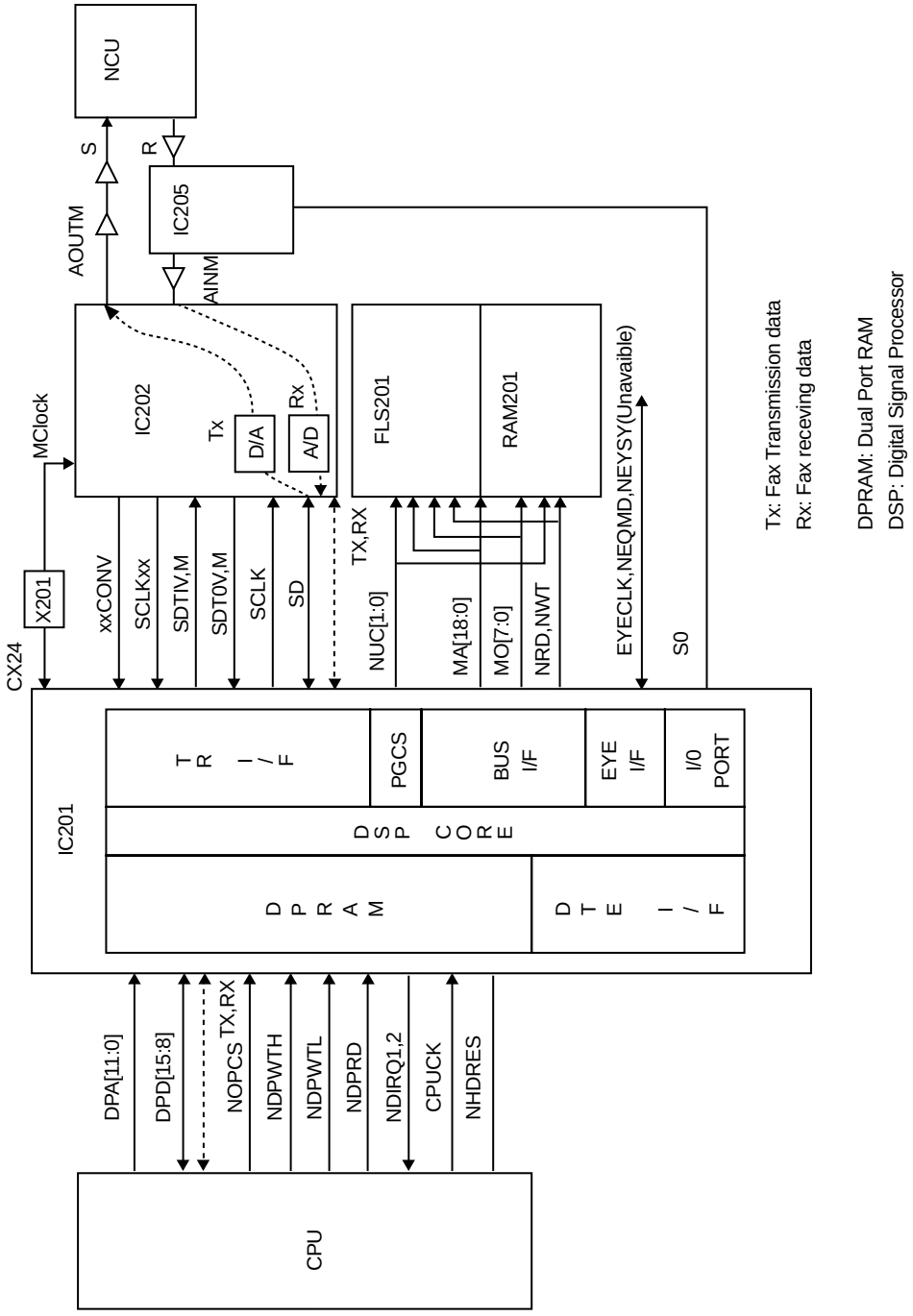
• RAM201 (High-speed 1MSRAM)
 A memory for storing the MN195004MFN-1 program.
 The modem operates by loading the program from the flash memory to the SRAM.

• IC205 (Analog switch IC)
 Gain control

Power supply voltages

• Digital +5 VD
• Analog +5 VA/-8 VA

Signal route



IC201 Pin Assignment

Destination	Description	Signal name	Pin No.	Pin No.	Signal name	Description	Destination
IC202		TVCONV	25	28	SDTIV		IC202
IC202		SCLK1T	29	22	SD	Transmission/Resception Data (Digital)	IC202
IC202		RVCONV	24				
IC202		SCLK1R	26	23	SCLK		IC202
IC202		SDTOV	27	51	NRESET	Reset Signal	IC202
IC202		TMCONV	33	32	SDTIM		IC202
IC202		SCLK21	34	108	MA18	Address Bus	FLS201
IC202		RMCONV	35	109	MA17	Address Bus	FLS201
IC202		SCLK2R	30	110	MA16	Address Bus	FLS201, RAM201
IC202		SDTOM	31	111	MA15	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA11	56	114	MA14	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA10	57	115	MA13	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA9	58	116	MA12	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA8	59	117	MA11	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA7	60	118	MA10	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA6	61	119	MA9	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA5	62	120	MA8	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA4	63	121	MA7	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA3	64	122	MA6	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA2	65	123	MA5	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA1	66	124	MA4	Address Bus	FLS201, RAM201
MCNT PCB	Address Bus	DPA0	67	125	MA3	Address Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD15	68	126	MA2	Address Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD14	69	127	MA1	Address Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD13	70	128	MA0	Address Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD12	71	1	MD7	Data Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD11	72	2	MD6	Data Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD10	73	3	MD5	Data Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD9	74	4	MD4	Data Bus	FLS201, RAM201
MCNT PCB	Data Bus	DPD8	75	5	MD3	Data Bus	FLS201, RAM201
MCNT PCB	Modem Chip Select	NDPCS	86	6	MD2	Data Bus	FLS201, RAM201
MCNT PCB	Write Enable	NDPWTH	87	7	MD1	Data Bus	FLS201, RAM201
MCNT PCB	Write Enable	NDPWTL	88	8	MD0	Data Bus	FLS201, RAM201
MCNT PCB	Read Strobe	NDPRD	89	15	NWT	Write Enable	FLS201, RAM201
MCNT PCB	CPU Clock (20Mhz)	CPUCK	94	16	NRD	Read Enable	FLS201, RAM201
IC202		ESSEL	52	99	NCU0	Chip Select	FLS201
IC202	Interrupt Request	NIRQ1	95	100	NCU1	Chip Select	RAM201
IC202	Interrupt Request	NIRQ2	96	91	NDIRQ1	Interrupt Request (IOGA)	MCNT PCB
MCNT PCB	Modem Hardware Reset	NHDRES	12				
MCNT PCB	Ground	HALT	19	92	NDIRQ2	Interrupt Request (IOGA)	MCNT PCB
MCNT PCB	Not used	BOOT	20				
X201	X'tal Clock (27.5760Mhz)	CX24	21	46	S0		IC205
X201	X'tal Clock (27.5760Mhz)	CX	11	50	EYECLK	TEST Terminal (Use not allowed)	Open
MCNT PCB	+5 Volt Supply (Digital)	NOI	38	54	NEOMD		Open
MCNT PCB	+5 Volt Supply (Digital)	MOD0	42	55	NEYSY		Open
MCNT PCB	+5 Volt Supply (Digital)	MOD1	43				
MCNT PCB	+5 Volt Supply (Digital)	MOD2	44				
MCNT PCB	+5 Volt Supply (Digital)	MOD3	45				
MCNT PCB	+5 Volt Supply (Digital)	+5VD0	9				
MCNT PCB	+5 Volt Supply (Digital)	+5VD1	13				
MCNT PCB	+5 Volt Supply (Digital)	+5VD2	37				
MCNT PCB	+5 Volt Supply (Digital)	+5VD3	77				
MCNT PCB	+5 Volt Supply (Digital)	+5VD4	113				
—	Ground (Digital)	DGND0	10				
—	Ground (Digital)	DGND1	14				
—	Ground (Digital)	DGND2	36				
—	Ground (Digital)	DGND3	76				
—	Ground (Digital)	DGND4	112				
—							

IC202 Pin Assignment

Destination	Description	Signal name	Pin No.		Pin No.	Signal name	Description	Destination
IC201		SCLK	1		24	VBAUD		IC201
IC201	Transmission/Reception Data (Digital)	SD	2		25	SCKL2T		IC201
					30	SCKL2R		IC201
IC201	Reset Signal	RESET	3		26	TMCONV		IC201
IC201		SDTIM	27		29	RMCONV		IC201
X201	X'tal Clock (24.5760Mhz)	MCLOCK	39		28	SDTOM		IC201
IC201		SDTIV	33		31	SCLK1T		IC201
IC204	Received Data (Analog)	AINM	11		36	SCLK1T		IC201
MCNT PCB	+5 Volt Supply (Digital)	+5VD	42		32	TVCONV		IC201
MCNT PCB	+5 Volt Supply (Analog)	+5VA1	6		35	RVCONV		IC201
MCNT PCB	+5 Volt Supply (Analog)	+5VA2	10		34	SDTOV		IC201
—	Ground (Digital)	DGND1	40		38	TMBAUD		IC201
—	Ground (Digital)	DGND2	41		9	AOUTM	Transmission Data (Analog)	MCNT
—	Ground (Analog)	AGND1	8					
—	Ground (Analog)	AGND2	12		13	VREF	Ground (Analog)	—
—	Ground (Analog)	AGND3	4					
—	Ground (Analog)	AGND4	14					

A3.4 UNC, WN5, and TB0 Circuit Diagram

The NCU board is selected from UNC, WN5, and TB0 because it differs depending on country's specifications. Therefore, the NCU circuit diagram is destined for the following countries.

- UNC circuit diagram
  US and Canada.

- WN5 circuit diagram
  Non-EC countries, New Zealand, and Australia.

- TB0 circuit diagram
  EC countries

1. Block diagram
   - Figure A3.4.1 shows a block diagram of UNC circuit.
   - Figure A3.4.2 shows a block diagram of WN5 circuit.
   - Figure A3.4.3 shows a block diagram of TB0 circuit

2. General functions of this circuit are as follows:

   1) Generates and detects signals to be exchanged with a telephone exchange or network in Phases A and E defined by ITU T.30.
      - Loop formation for call origination
      - Line current detection (see note 1) before call origination
      - Dial tone detection (see note 1)
      - Generation of dial pulses (see note 2)
      - Busy tone detection (see note 1)
      - Ringing signal detection

   2) Sends various data and signals from the C76 board to the telephone line after amplification.
      - Picture data/Protocol/Tonal signals/PB tone, etc.

   3) Sends the following signals received from the line to the C76 board as data after amplification.
      - Picture data/Protocol/Tonal signals, etc.

   Note 1: This procedure may be omitted depending on the dial parameters.
   Note 2: MF (Multi-frequency) tone is generated by the modem and transferred to the telephone line via the NCU board.

3. Explanation on CN3 Terminals

CN3 pin No.	Terminal name	Explanation	UNC (US.CA)	WN5 (INT'L)	TB0
1	REV2	Detection and output of the direction of DC line current.	*	*	*
2	OH2	Detection of off-hook of terminal connected to TEL-1 or TEL-2.			
3	OH1	Output upon circuit current detection after fax line seizure	*	*	*
4	RI	0 - 5 V signal output synchronized with the ringing signal frequency			
5	NC	Unused terminal	*	*	*
6	PP	Relay control signal for special service code detection at parallel pickup or remote reception			
7, 8	E	GND			
9, 10	sub + 5 V	Sub power supply for OH2 and RI detection			
11, 12	+ 5 V	Power supply for relays and logic circuits			
13, 14	+ 5 VA	+5 V power supply for analog circuit	*	*	*
15, 16	S	TX Signal			
17, 18	– 5 VA	– 5 V power supply for analog circuit	*	*	*
19, 20	R	RX Signal			
21, 22	SG	Signal ground			
23, 24	Rp	Receiving sensitivity determination terminal			
25	DP	Pulse dial control signal			
26	CML	Line seizure control signal			
27	F. ICC	Loop current control signal upon line seizure	*	*	
28	SR	Control signal for connection between LINE and TEL terminals			
29	PBXE	Control signal for connecting one of LINE terminal to the PBXE terminal	*	*	*
30	MUTE	Control signal for pulse dial improvement and bell shunt relay	*		

*Note *: Unused.*

4. Description on the NCU Block Diagram

4.1 UNC circuit diagram

① Lightning arresters (AR1, 2)
The nominal operating voltage is 350 V.
When connecting the ground of the arrestor to the chassis, tighten ARG on the PCB with a screw. At this time, the PCB is grounded through the power cable.
The TB1 arrestor ground terminal can also be used to connect to the earth directly.

④ DC circuits (R10, R11, C4)
These circuits provide DC characteristics according to the line requirements using the primary DC resistor in the line transformer T1 and the R10 and R11 resistors . The capacitor C4 bypasses AC signals.

⑤ Impedance matching network (R523, R536, C503)
This circuit matches the impedance between the line and equipment to reduce reflection of transmitted signals.

⑥ Receiving sensitivity (R574, R504)
The receiving sensitivity at line seizuring is determined by R574 and the MF tone receiving sensitivity at parallel pickup is determined by R504.

⑦ CML (RL1)
This circuit selectively switches the line between the telephone or facsimile.

⑧ SR (RL2)
This circuit connects the line with the telephone. During facsimile transmission, it disconnects the telephone.

⑪ PP (RL6)
If this circuits detects MF or CNG tones without seizuring a line, it sets a proper receiving sensitivity.

⑫ DP (RL3)
This circuit generates pulse dials.
If the circuit detects MF or CNG tones without seizuring a line, it opens to increase the impedance.

⑬ Pickup RC (R5, C31)
These circuits insert a high-impedance resistor and capacitor serially to prevent the line impedance from dropping by the line transformer T1.

⑭ Ring detectors (IC1)
These circuits detect a ring signal arriving to the line. If the input ring signal exceeds a specific voltage, the circuits output a signal having of RI the same frequency as incoming RI.

⑮ Line transformer (T1)
This circuit processes send/receive signals required for facsimile transmission, dial tone receive signals required for automatic dialing, and MF tone send and remote receive signals. It separates between the line and equipment in terms of DC and also keeps a balance between the line and the ground. The transformer on the UNC board for OKIFAX 5600/5900/5950 is covered with the shield case for the low-level receiving countermeasure.

⑯ Off-hook detector (IC2)
This circuit detects the off-hook state of the telephone connected to the TEL1, TEL2 through LINE terminals.

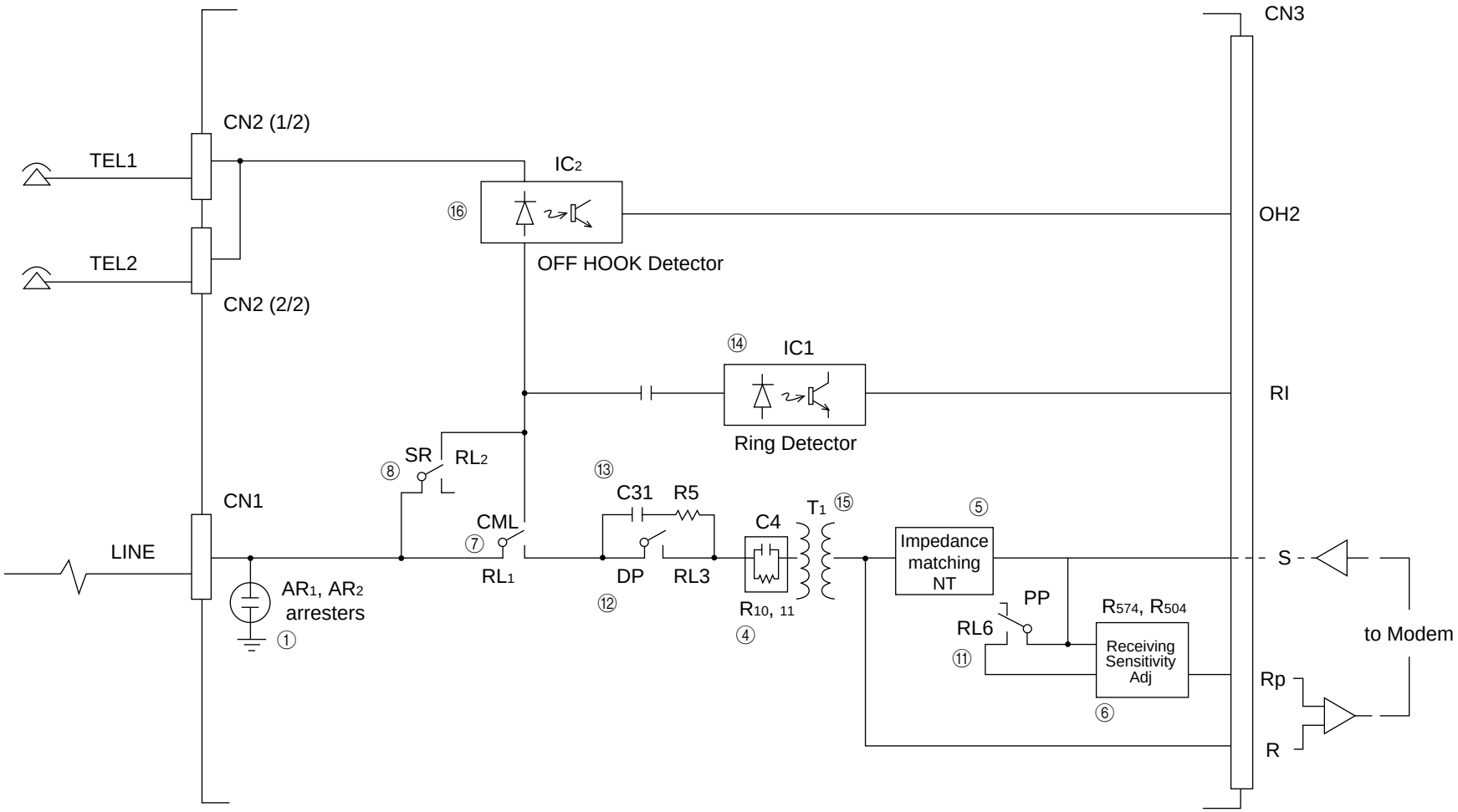


Figure A3.4.1 Block Diagram of UNC

4.2 WN5 circuit diagram

① Lightning arresters (AR1, 2)
The nominal operating voltage is 500 V.
When connecting the ground of the arrestor to the chassis, tighten ARG on the PCB with a screw. At this time, the PCB is grounded through the power cable.
The TB1 arrestor ground terminal can also be used to connect to the earth directly.

② Loop current detector (IC4) — Optional
When a line is seizured, this circuit detects a DC loop current to notify the fact.
For detection (OH1), it outputs the low level to the nominal input current of 10 mA or more.

③ Diode bridge (DB1)
This circuit rectifies the loop current so that the DC circuit characteristics are not affected by a polarity change over the line.

④ DC circuits (Q3, R540, R541, C13, R9, R209, and R309)
These circuits provide DC characteristics according to the line requirements depending on the DIP SW (S3) position.

⑤ Impedance matching network (R523, R536, C503 ... R823, R836, C803)
This circuit matches the impedance between the line and equipment to reduce reflection of transmitted signals.
It provides impedance (return loss) characteristics to meet the line requirement using the connector keys (CN15 to CN45).

⑥ Receiving sensitivity (R537, R539...R837, R839)
The receiving sensitivity at line hunting is determined by R539 to R839 depending on the line impedance. Similarly, the MF tone receiving sensitivity at parallel pickup is determined by R537 to R837. The receiving sensitivity is set using connector keys (CN15 to CN45).

⑦ CML (RL1)
This circuit selectively switches the line between the telephone or facsimile.

⑧ SR (RL2)
This circuit connects the line with the telephone. During facsimile transmission, it disconnects the telephone.

⑨ DP (IC5)
This circuit generates pulse dial signals.

⑩ MUTE (IC7)
During pulse dialing, this circuit closes to reduce the DC loop resistance.

⑪ PP (RL6)
If this circuits detects MF or CNG tones without seizuring a line, it disconnects Impedance matching Net work (5) to increase the input impedance and also sets the receiving sensitivity.

⑫ MUTE (RL3)
During pulse dialing, this circuit opens to prevent pulse distortion caused by capacitor C11. If it detects MF or CNG tones without seizuring a line, it opens to increase the impedance.

⑬ Pickup RC (R590, C31)
These circuits insert a high-impedance resistor and capacitor serially to prevent the line impedance from dropping by the line transformer T1.

⑭ Ring detectors (IC1)
These circuits detect a ring signal arriving to the line. If the input ring signal exceeds a specific voltage, the circuits output a signal of RI having the same frequency as incoming RI.

⑮ Line transformer (T1)
This circuit processes send/receive signals required for facsimile transmission, dial tone receive signals required for automatic dialing, and MF tone send and remote receive signals. It separates between the line and equipment in terms of DC and also keeps a balance between the line and the ground.

⑯ Off-hook detectors (IC2, RL7)
These circuits detect the off-hook state of the telephone connected to the TEL1, TEL2, through LINE terminal. IC2 uses a high detection sensitivity than of RL7. In TEL/FAX mode, the higher sensitive IC2 is used to detect the off-hook state of the telephone while the main equipment is hunting a line.
Usually, IC2 is short-circuited by the CML relay (7) in the standby state and RL7 is used for off-hook detection.

⑰ Impedance switches (CN15 to CN45)
These circuits set the impedance according to the line requirement.
220: 220 ohm + 820 ohm//115 nF (CN15)
275: 275 ohm + 850 ohm//150 nF (CN25)
370: 370 ohm + 620 ohm//310 nF (CN35)
600: 600 ohm (CN35)

⑱ DC resistance switch (SW3)
This switch sets the DC resistance according to the line requirement.

⑲ Ring impedance switches (S1-3 to S1-6)
These switches set the ring impedance according to the line requirement.

⑳ Ring sensitivity switch (S4)
This switch sets the ring sensitivity according to the line requirement.

㉑ Telephone cascade/parallel switches (S1-1 to S1-2)
To connect the telephone connected to the TEL1 terminal and an external telephone in parallel, set the switches to ON.

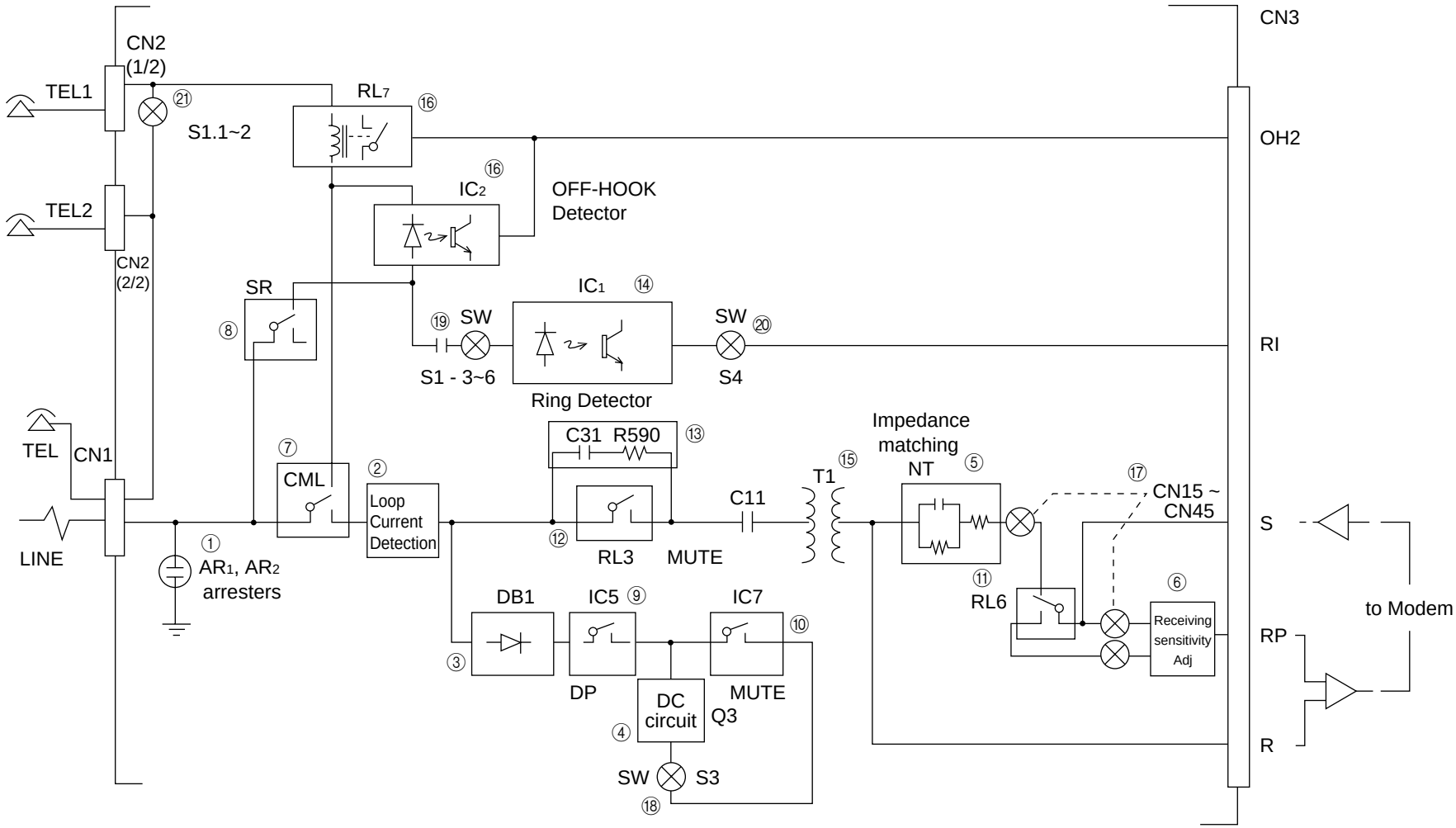


Figure A3.4.2 Block Diagram of WN5

4.3 TB0 circuit diagram

① Lightning arresters (AR1, 2)
The nominal operating voltage is 500 V.
When connecting the ground of the arrestor to the chassis, tighten ARG on the PCB with a screw. At this time, the PCB is grounded through the power cable.
The TB1 arrestor ground terminal can also be used to connect to the earth directly.

③ Diode bridge (DB1)
This circuit rectifies the loop current so that the DC circuit characteristics are not affected by a polarity change over the line.

④ DC circuits (Q1, R506, R507, C4, R602)
These circuits provide DC characteristics according to the line requirements.

⑤ Impedance matching network (R510, R512, C502)
This circuit matches the impedance between the line and equipment to reduce reflection of transmitted signals.

⑥ Receiving sensitivity (R517, R518, C520)
The receiving sensitivity at line hunting is determined by R518, C520 and the MF tone receiving sensitivity at parallel pickup is determined by R518, C520, R517.

⑦ CML (RL1)
This circuit selectively switches the line between the telephone or facsimile.

⑧ SR (RL2)
This circuit connects the line with the telephone. During facsimile transmission, it disconnects the telephone.

⑨ DP (IC2)
This circuit generates pulse dial signals.

⑩ MUTE (IC3)
During pulse dialing, this circuit closes to reduce the DC loop resistance.

⑪ PP (RL6)
When it detects MF or CNG tones without seizuring a line, it disconnects NT (5) to increase the input impedance and also sets the receiving sensitivity.

⑫ MUTE (RL3)
During pulse dialing, this circuit opens to prevent pulse distortion caused by capacitor C7.
When it detects MF or CNG tones without seizuring a line, it opens to increase the impedance.

⑬ Pickup RC (R505, C5)
These circuits insert a high-impedance resistor and capacitor serially to prevent the line impedance from dropping by the line transformer T1.

⑭ Ring detectors (IC1)
These circuits detect a ring signal arriving to the line. If the input ring signal exceeds a specific voltage, the circuits output a signal of RI having the same frequency as the incoming RI.

⑮ Line transformer (T1)
This circuit processes send/receive signals required for facsimile transmission, dial tone receive signals required for automatic dialing, and MF tone send and remote receive signals. It separates between the line and equipment in terms of DC and also keeps a balance between the line and the ground.

⑯ Off-hook detectors (IC8, RL7)
These circuits detect the off-hook state of the telephone connected to the TEL1, TEL2, through LINE terminals. IC8 uses a high detection sensitivity than of RL7. In TEL/FAX mode, the higher sensitive IC8 is used to detect the off-hook state of the telephone while the main equipment is hunting a line.
Usually, IC8 is short-circuited by the CML relay (7) in the standby state and RL7 is used for off-hook detection.

㉗ FICC (IC4)
This circuits reduces the DC resistance to increase the loop current momentarily to assure operation of the switch at line seizuring.

㉘ Constant current circuits (Q502 and Q503)
These circuits provide DC characteristics according to the TBR-21 requirement.

㉙ Shunt (RL9)
This circuit prevents bell resonances in the telephone sets connected in parallel during pulse dialing and also reduces distortions of the pulse waveform.

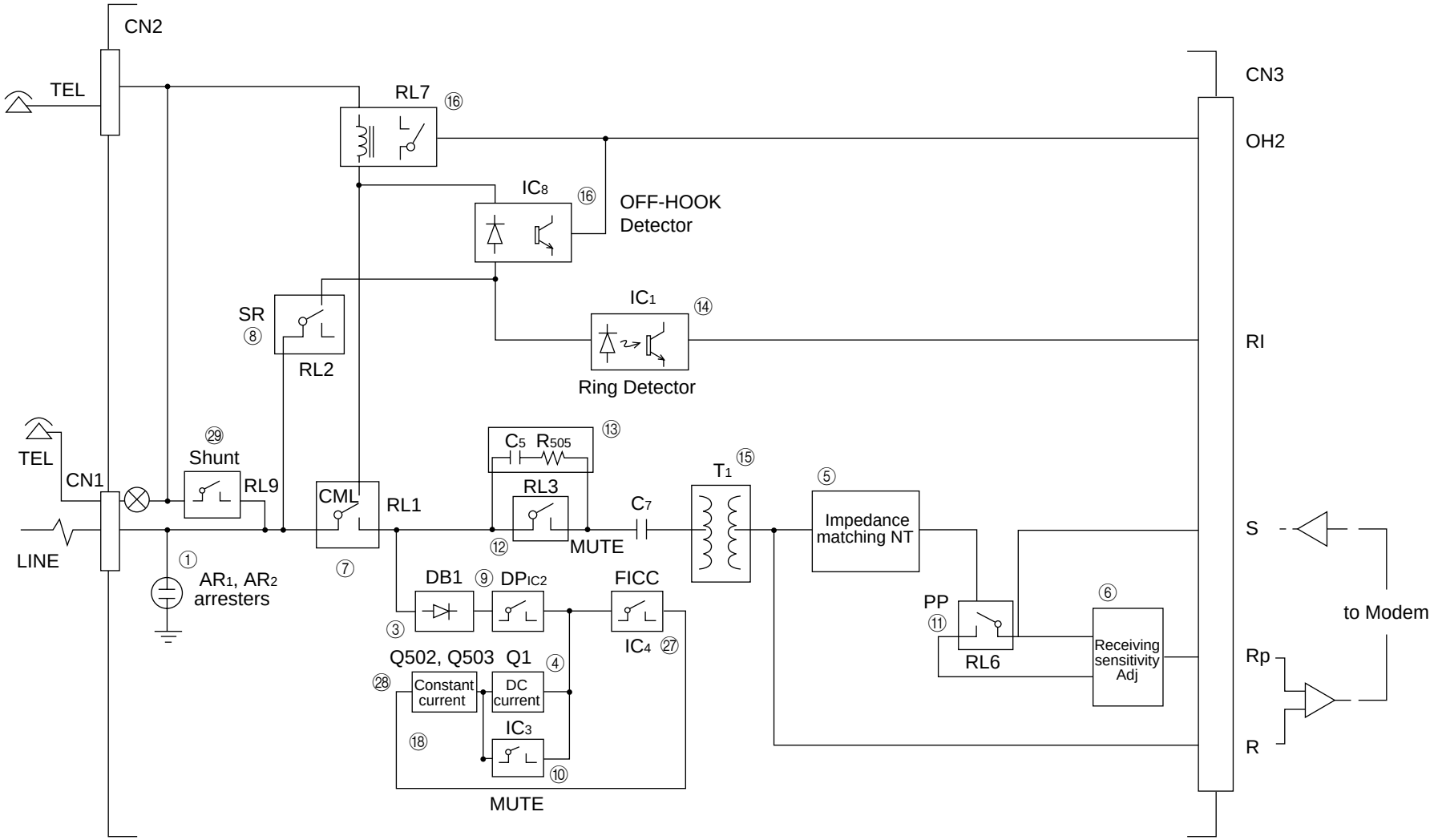


Figure A3.4.3 Block Diagram of TB0

A3.5 Power Supply Board

Caution:

- Voltage charged in the capacitor may cause shock hazards. After turning on the AC power, never touch the pattern on the power supply board.

- For maintenance, Oki Data Corporation recommendes replacement of Power supply board (Both high voltage power supply board and Low voltage power supply board), but not repair of the boards.
  Any purchase orders for components of the power supply board are not accepted. Any trouble on power supply board that was repaired at your side once is not guaranteed.

1. Low voltage power supply board
   MPW2520: 120V
   MPW2420: 230V

   (1) Specifications

   AC power input range:

	Input voltage	Frequency
MPW2520	120V (-15%, +6%)	50Hz/60Hz (+/-2%)
MPW2420	230V (-14%, +15%)	50Hz/60Hz (+/-2%)

   Note: Only the MPW2420 conforms to the radio-frequency interference regulations and has a power saving feature.

   Output range:

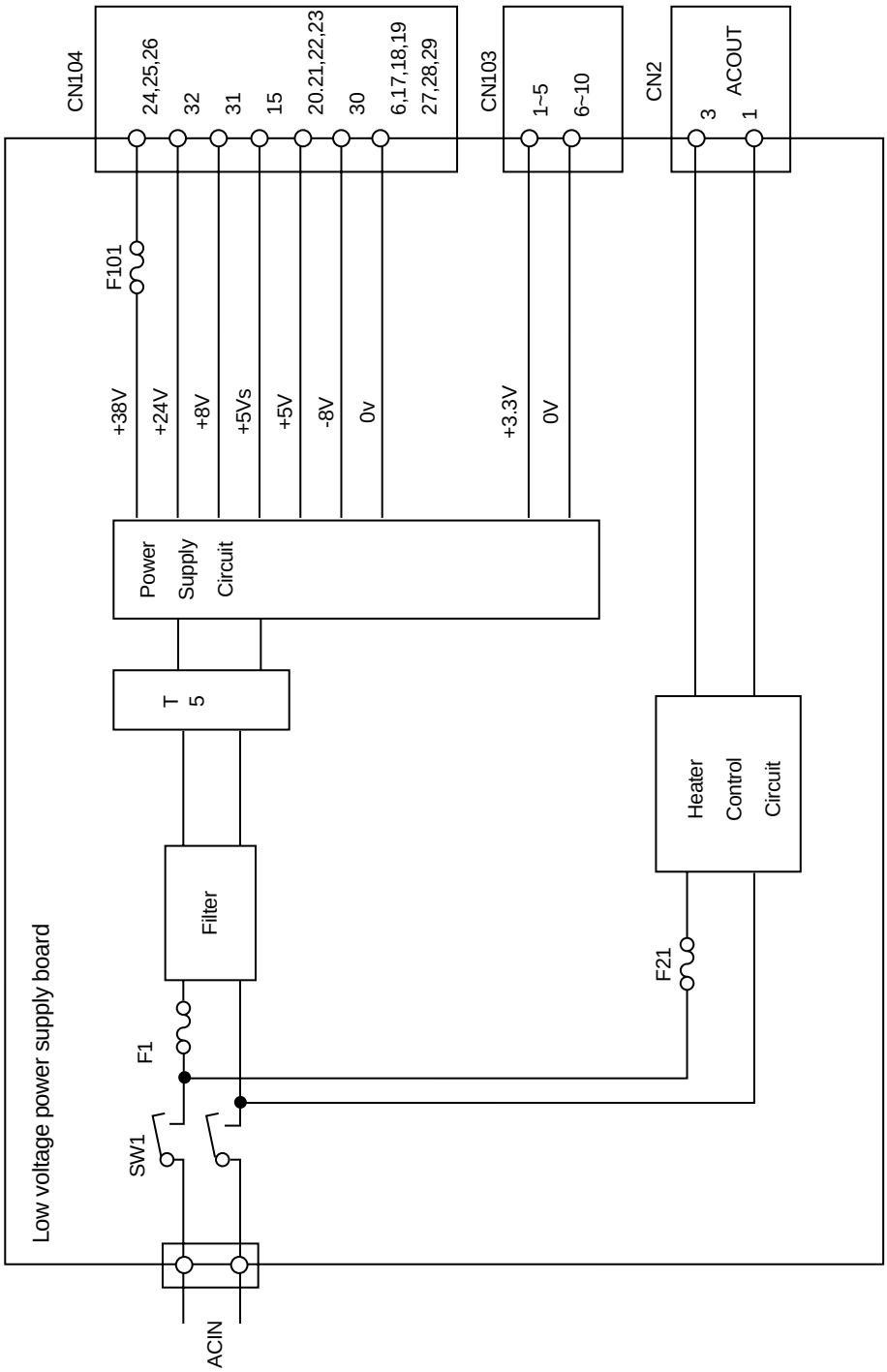
Connector/Pin No.	Normal output Voltage	Voltage range	Normal output Current	Load alteration range
CN003/Pin 20-23	+5V	+/-4%	2.4A	0.4 - 2.4A
CN003/Pin 24-26	+38V	26 - 45V	2.6A	0 - 3.1A
CN003/Pin 31	+8V	+/-4%	0.5A	0 - 0.2A
CN003/Pin 30	-8V	+/-4%	0.2A	0 - 0.2A
CN003/Pin 32	+24V	22 - 27V	0.2A	0 - 0.2A
*CN003/Pin 15	+5Vs	+/-4%	20mA	15m - 50mA
CN103/Pin 1-5	+3.3V	+/-3%	1.5A	0.1 - 4.3A

   Note: The MPW2520 does not supply +5 Vs from CN003/Pin 15 because it is used in the power save mode.

   Protection against overvoltage/overcurrent

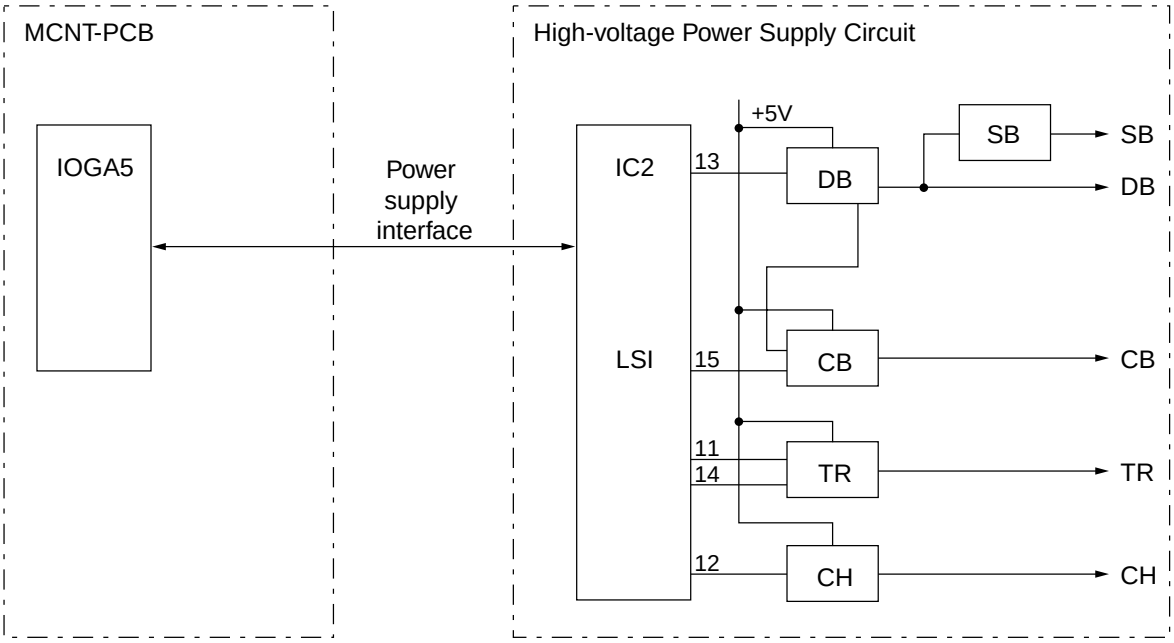
   +5Vs: The protection should be open with Fuse (F501) and shorted with D503. And sometime D202, D203 should be shorted.
   +38 V: This unit's O.C.P. is drooping characteristic type. (O.C.P. TIME: MAX 10S) The protection should be shorted with Q201.
   +8 V: Overcurrent protection circuit operation
   -8 V: Overcurrent protection circuit operation
   +24 V: Overcurrent protection circuit operation
   +3.3 V: Overcurrent protection circuit operation; Auto resetting (F1 opens if this state continues for more than 10 seconds.)

(2) Block Diagram



A3.6 High-voltage Power Supply Circuit

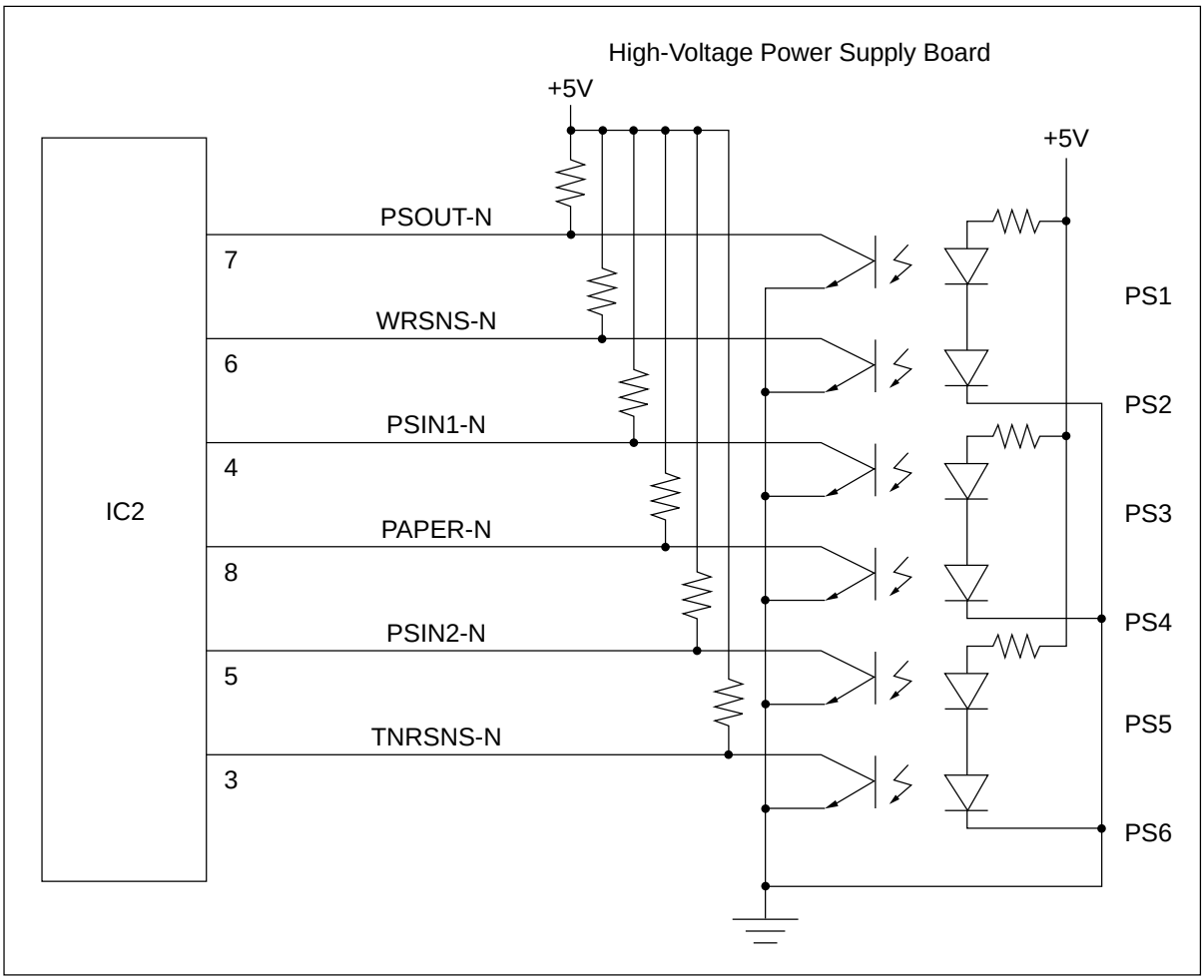
This high-voltage power supply circuit receives the high-voltage generation timing control command that is transmitted in serial through the power supply interface from the control section. It decodes this command by LSI (IC2) and outputs high-frequency pulses to the corresponding high-voltage generating circuits through pins 11, 12, 13, 14 and 15 of LSI (IC2). It supplies +5V to each high-voltage generating circuit as the source voltage. When the cover is open, the supply of +5V is interrupted to interrupt all the high-voltage outputs. The relationship between the high-frequency pulse output pins and the high-voltage outputs is shown in the following table.

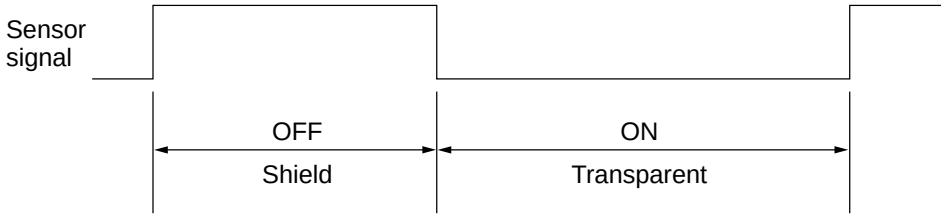


High-voltage outputs / High-frequency pulse output pins	SB	DB	CB	TR	CH	Remarks
11				+1.2kV		
12					-1.3kV	
13	0V	+300V				TRSEL 3: Hi-Z TRSEL 5: L
	-500V	-265V	+400V			TRSEL 3: L TRSEL 5: Hi-Z
14				-1.1kV		
15			-1.35kV			

Part with slant line: no output

Sensor control





A3.7 G4A-PCB

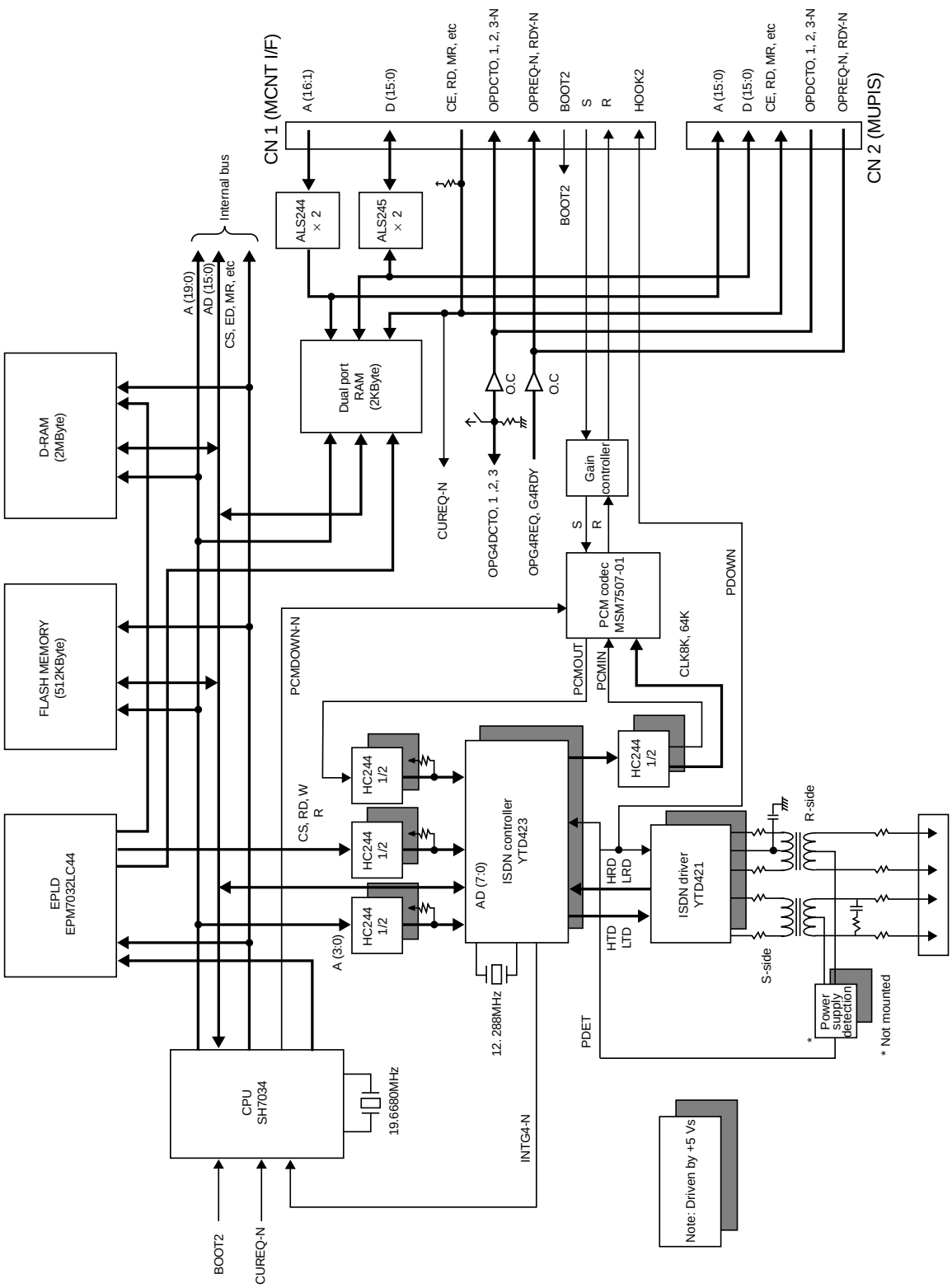
This PCB board is optionally available. Using this board allows the system to be ready for the G4 protocol. This board is connected to the MCNT board through the Oki's original MUPIS interface.

The block diagram of this board is shown on the next page.

This board is connected to the MCNT board with an 80-pin connector (CN1). Sixteen pins of this connector are signals lines dedicated to the G4A board, and the remaining 64 pins are signal lines shared with the optional LAN network board. The LAN network board is connected to the 64-pin connector (CN2) when it is used along with this board. It is connected to the line via the RJ-45 connector (CN3).

Data is transferred to/from the CPU on the MCNT board via the 2-KB dual port RAM. When data is sent, the MCNT board causes an interrupt to the G4A board using a CUREQ-N signal and writes data into the 2-KB dual port RAM. The G4A board expands the data from the dual port RAM in the DRAM, and sends the expanded data to the line via the driver.

When data is received, the G4A board causes an interrupt to the MCNT board using an OPREQ signal and writes data from the DRAM into the dual port RAM. The NCNT board reads data from the dual port RAM, expands the data in the DRAM on the MCNT board, and sends the data to the LED head via the IOGA5.



G4A Board Block Diagram

A3.8 G3A-PCB

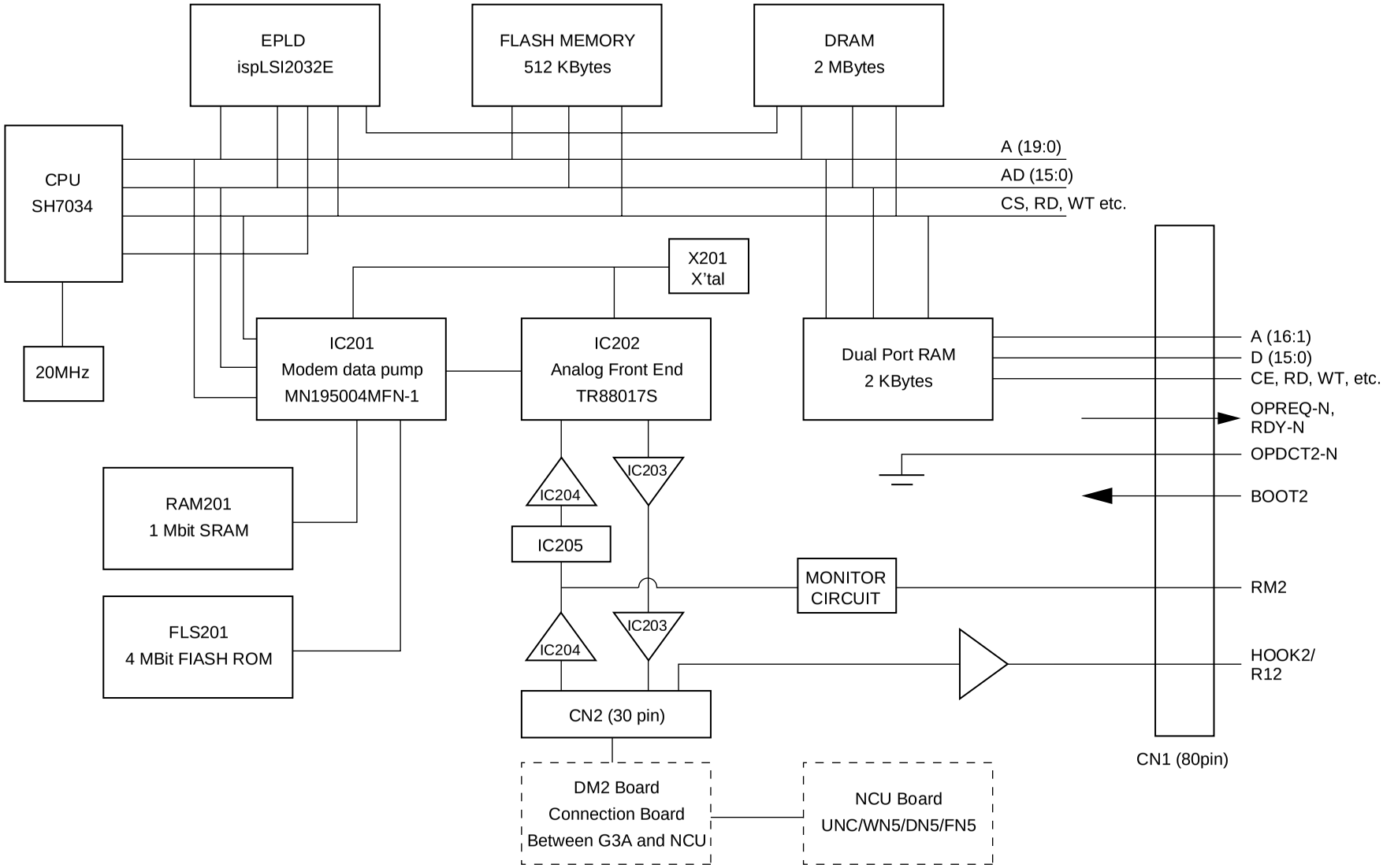
This PCB board is optionally available. Using this board allows the system to be ready for additional G3 line. This board is connected to the MCNT board through the OKI's original MUPIS interface.
And this board is connected to the NCU board through the DM2 board.

The block diagram of this board is shown on the next page.

This board is connected to the MCNT board with an 80-pin connector (CN1). One pin of this connector (RM2) is signal line dedicated to the G3A board, and fourteen pins of this connector are signal lines shared with the option G4A board, and the remaining 64 pins are signal lines shared with the optional G4A board and LAN network board. It is connected to the NCU board through the DM2 board with 30-pin connector (CN2).

Data is transferred to/from the CPU on the MCNT board via the 2KB dual port RAM. When data is sent, the MCNT board causes an interrupt to the G3A board using a CUREQ-N signal and writes data into the 2KB dual port RAM.
The G3A board reads the data from the dual port RAM in the DRAM, and sends the data to the NCU board via the DM2 board.

When data is received, the G3A board causes an interrupt to the MCNT board using an OPREQ signal and writes data from DRAM into the dual port RAM. The MCNT board reads data from the dual port RAM, expands the data in the DRAM on the MCNT board, and sends the data to the LED head via the IOGA5.



G3A Board Block Diagram

Appendix B DESCRIPTIONS OF PRINT OPERATION

B.1 Mechanical Components

1) EP drum cartridge

   The EP (image) cartridge consists of an EP (image) drum, a charger, and a developer. The cartridge forms a toner image on the drum, using an electrostatic latent image formed by the LED print head.

2) Resist motor

   This resist motor is a pulse motor of 48 steps/rotation that is two-phase excited by the signal from the M76 board. It drives the hopping roller and the resist roller via two one-way clutches according to the direction of rotation.

3) Drum motor

   This drum motor is a pulse motor of 48 steps/rotation that is two-phase excited by the signal from the M76 board and is the main motor of this mechanism.

4) LED head

   Image data for each dot on a line from the M76 board is received by the shift registers and latch registers. The Letter size LED head are driven to radiate the image data on to the EP (image) drum.

5) Fuser

   The fuser consists of a heater, a heat roller, a thermister and a thermostat.

   An AC voltage from the power supply board (H10, and Low Power Voltage Unit) is applied to the heater under the control of the HEAT-N signal from the M76 board. This AC voltage heats the heater. The M76 board supervises the heat roller temperature via the thermistor, and regulates the heater roller at a predetermined temperature (about 185 ˚C for OKIFAX 5750/5950) by connecting or disconnecting the AC voltage supply to the heater.

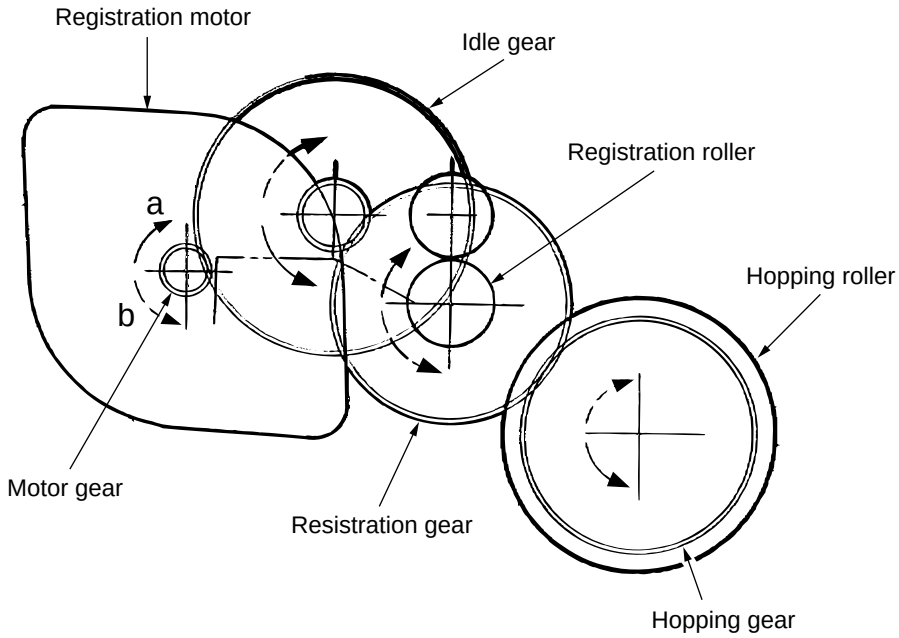
   If the heater roller temperature rises abnormally, the thermostat of the heater voltage supply circuit is activated to cut off the AC voltage supply forcibly.

B.2 Description of Print Operations

B.2.1 Process Operations

1) Hopping and feeding

Hopping and feeding are affected by a single resist motor in the mechanism shown below.

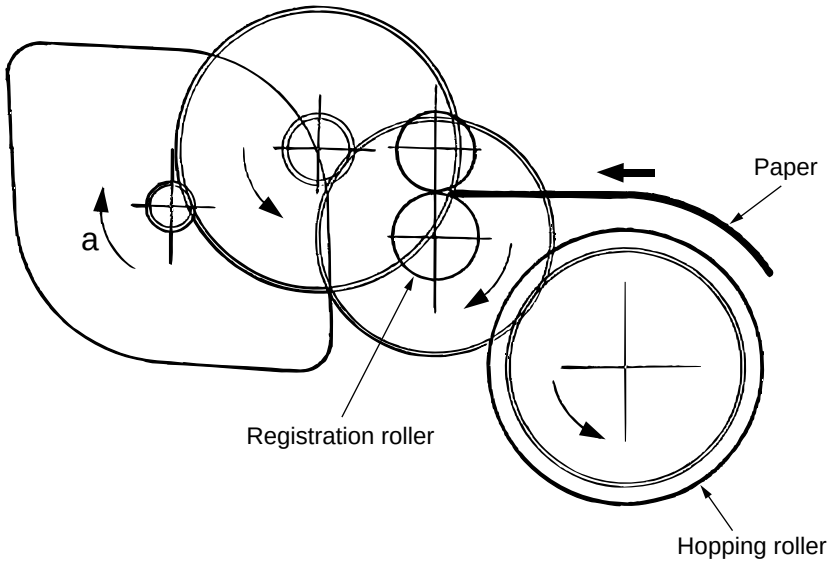


Turning the resist motor in the "a" direction drives the hopping roller. Turning the resist motor in the "b" direction drives the resist roller. The resist gear and hopping gear contain one-way clutch, so that turning each of these gears in reverse direction will not be transmitted to the corresponding roller.

(a) Hopping

① Hopping turns the resist motor in the "a" direction (in the CW direction) and drives the hopping roller to advance the paper until the inlet sensor turns on. (In this case, the resist gear also turns, but the resist roller is prevented from turning by the one-way clutch gear.)

② After the paper has turned on the inlet sensor, the paper is further advanced by a predetermined length until the paper hits the resist roller. (The skew in the paper can thus be corrected.)

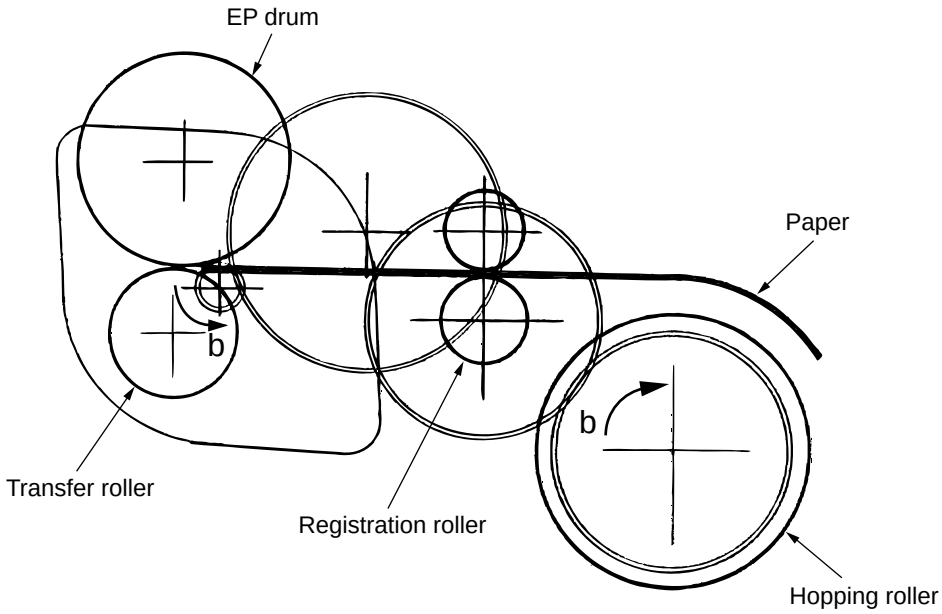


CW = Clockwise

(b) Feeding

① After end of hopping, turning the resist motor in the "b" direction (in the CCW direction) drives the resist roller to advance the paper. (In this case, the hopping gear also turns, but the hopping roller is prevented from turning by the one-way clutch gear.)

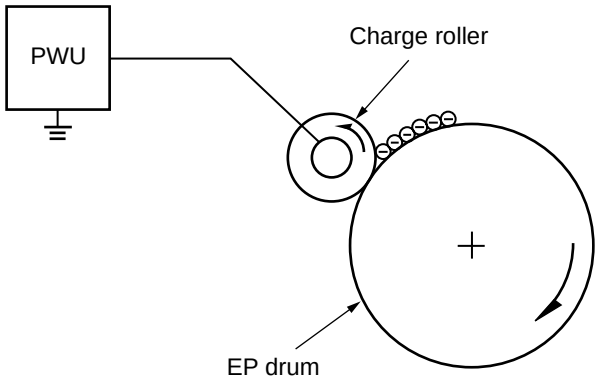
② The paper is further advanced in synchrony with the print data.



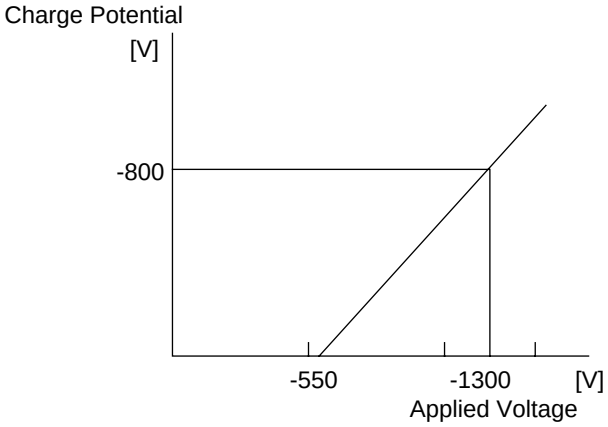
CCW = Counterclockwise

2) Charging

Charging is affected by applying a DC voltage to the charge roller thta is in contact with the EP (image) drum surface.

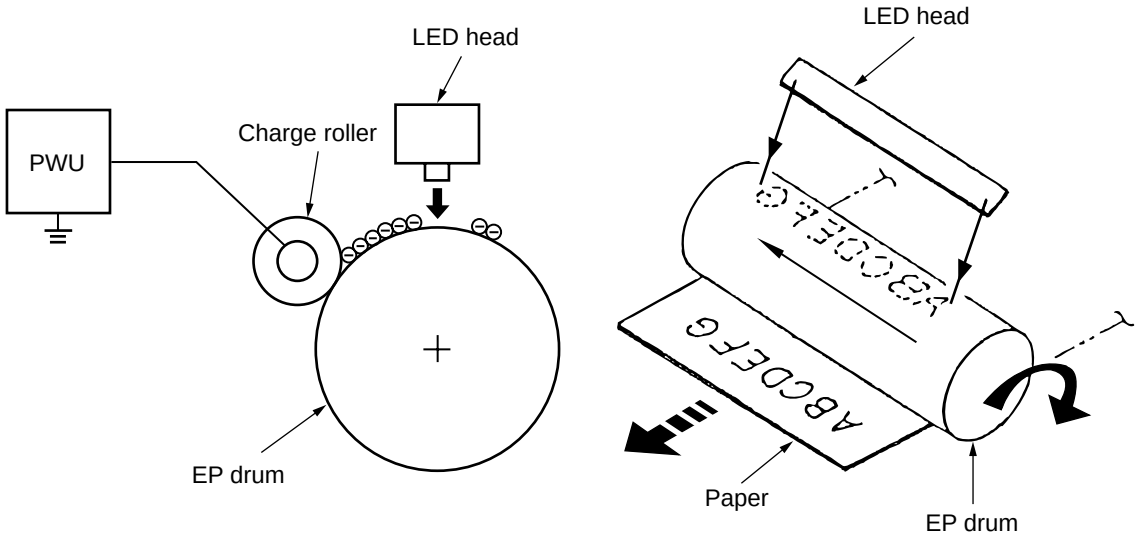


The charge roller is composed of two layers consisting of a conductive layer and a surface protective layer that has elasticity, in order to secure a good contact with the EP (image) drum. When the DC voltage (-1.30KV KVDC) applied from the Power Supply Unit exceeds a threshold value, charging begins. The applied voltage is proportional to charge potential with off set of approx. -550V.

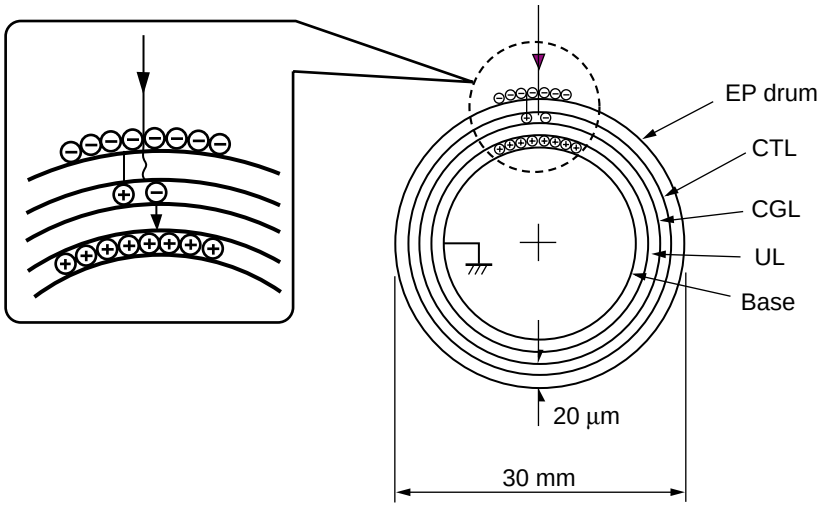


3) Exposure

Light emitted from the LED head irradiates the EP (image) drum surface with negative charges. The surface potential of the irradiated part of the EP drum drops, thereby forming an electrostatic latent image associated with the image signal.



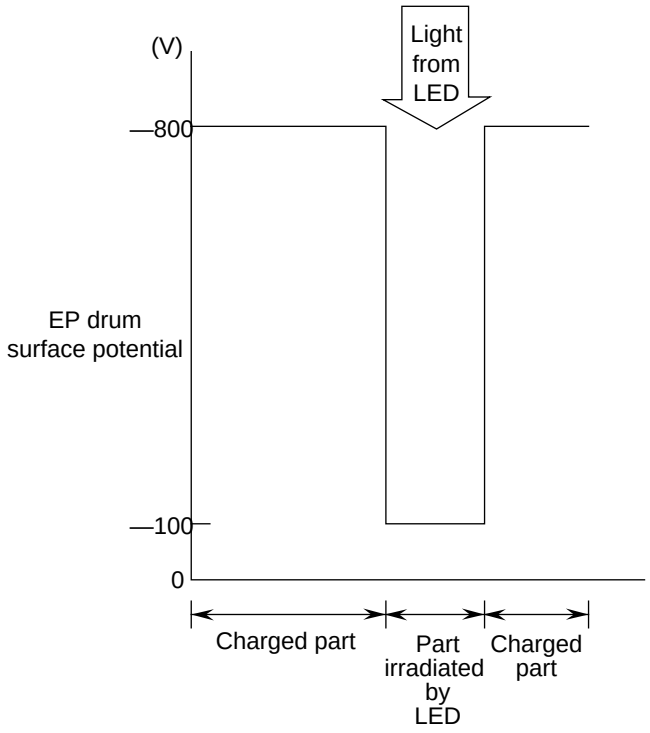
The EP (image) drum is coated with an underlayer (UL), a carrier generation layer (CGL), and carrier transfer layer (CTL) on the aluminum base. The organic photo conductor layer (OPC), comprising a CTL and a CGL, is about 20 mm thick.



The EP (image) drum surface is charged to about -800 V by the contact charge of the charge roller.

When light from the LED head irradiates the EP (image) drum surface, the light energy generates positive and negative carriers in the CGL. The positive carriers are moved to the CTL by an electrical field acting on the EP (image) drum. Likewise, the negative carriers flow into the aluminum layer (ground).

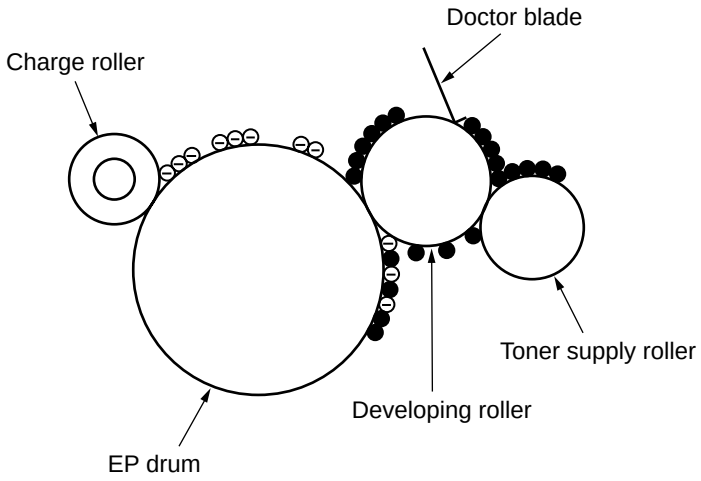
The positive carriers moved to the CTL combine with the negative charges on the EP (image) drum surface accumulated by the contact charge of the charge roller, lowering the potential on the EP (image) drum surface. The resultant drop in the potential of the irradiated part of the EP (image) drum surface forms an electrostatic latent image on it. The irradiated part of the EP (image) drum surface is kept at about -100 V.



4) Developing

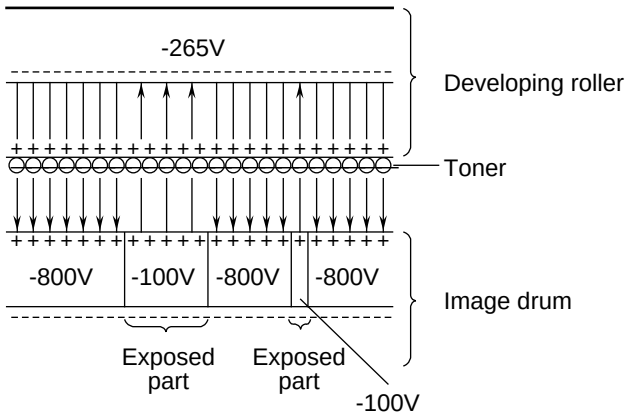
Toner is attracted to the electrostatic latent image on the EP (image) drum surface to convert it into a visible toner image. Developing takes place at the contact between the EP (image) drum and the developing roller.

① As the toner supply roller rotates while rubbing on the developing roller, a friction charge is generated between the developing roller and the toner, allowing the toner to be attracted to the developing roller. (The developing roller surface is charges positive and the toner, negative.)



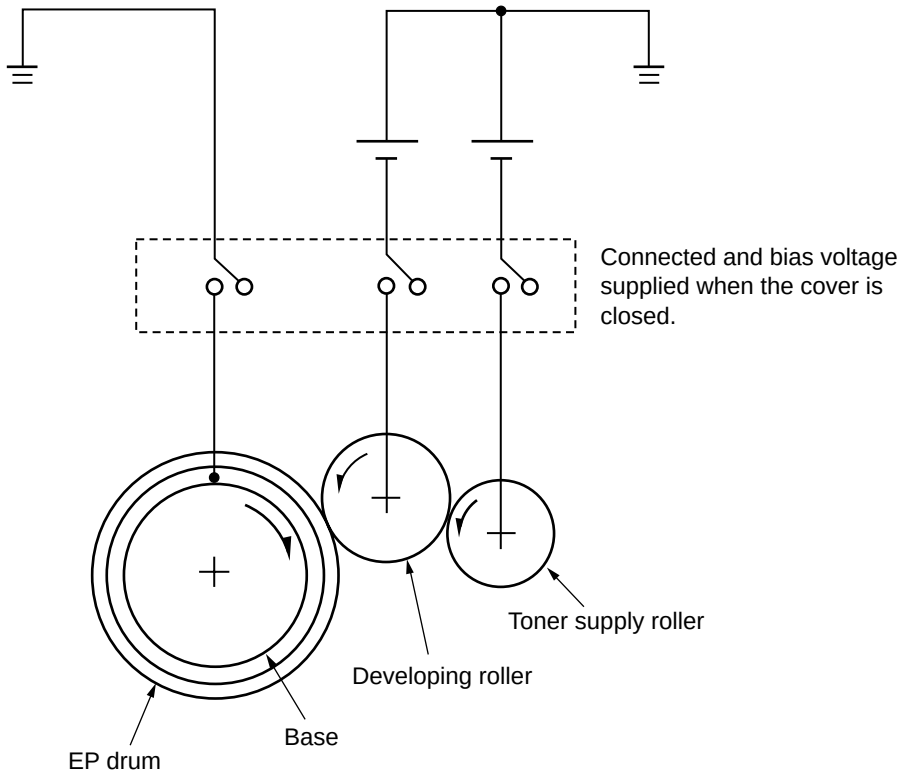
② The toner attracted to the developing roller is scraped off by the doctor blade, forming a thin coating of toner on the developing roller surface.

③ Toner is attracted to the exposed part (low-potential part) of the EP (image) drum at the contact between the EP (image) drum and the developing roller, making the electrostatic latent image visible.



An illustration of activities at the contact point of the image drum surface and the developing roller (arrow marks denote the direction of the electric field).

Note: The toner supply roller and the developing roller are supplied with bias voltages required during the developing process as shown below. -500 VDC is supplied to the toner supply roller, -265 VDC to the developing roller.

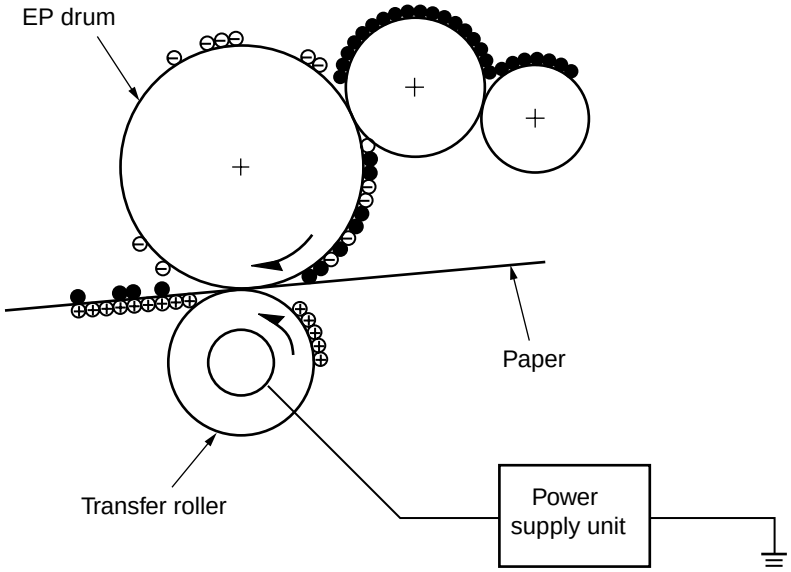


5) Transfer

The transfer roller is composed of conductive sponge material and is designed to make the EP (image) drum surface and the paper closely into contact.

Paper is placed over the EP (image) drum surface, and a positive charge, opposite in polarity to the toner, is applied to the paper from its reverse side.

The application of a high positive voltage (+1.5 KVDC) from the Power Supply Unit (H10 board) to the transfer roller causes the positive charge induced on the transfer roller surface to be transferred to the paper at the contact between the transfer roller and the paper. As a result, toner charged negative that is attracted to the EP (image) drum surface is transferred to the upper side of the paper by the positive charge on the lower side of the paper.

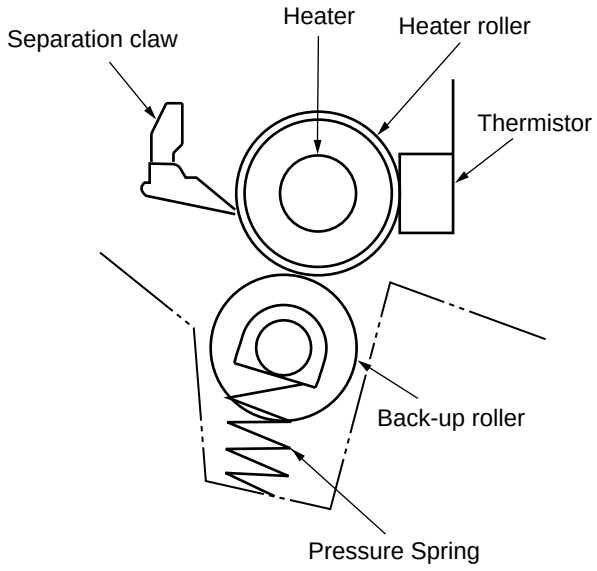


6) Fusing

After the end of the transfer operation, the unfused toner image is fused on the paper under heat and pressure as it passes between the heater roller and the back-up roller. The heater roller with a Teflon coating incorporates a 500 W heater (Halogen lamp), which heats the heat roller.

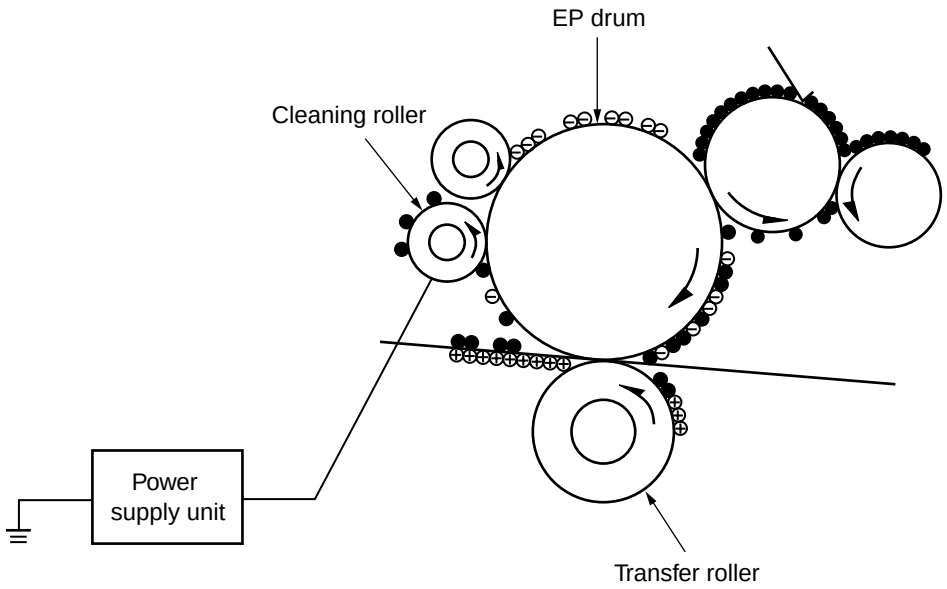
A thermister, which is in contact with the heater roller, regulates the heater roller at a predetermined temperature (about 185 ˚C for OKIFAX 5000 series). A safety thermostat cuts off voltage supply to the heater by opening the thermostat in the event of abnormal rise in temperature.

The back-up roller is held under a pressure of 2.84 kg by the pressure spring at each side.



7) Cleaning

After the end of the transfer, residual toner on the EP (image) drum is attracted to the cleaning roller temporarily by static electricity to clean the EP (image) drum surface.



8) Cleaning of rollers

The charge roller, transfer roller and cleaning roller are cleaned in the following cases:

- In warning up at power-on time
- In warning up after the cover is opened and closed
- When the number of accumulated sheets is 10 and the printout operation ends

Changes in bias voltage applied to each roller move adhesive toner from the roller to the EP (image) drum and return it to the developer.

	Cleaning "NO" (V)	Cleaning "YES" (V)
DB+	(+300 V)	—
DB-	-265 V	-265 V
TR+	+1500 V	+1500 V
TR-	—	-1100 V
CB (cleaning)	+400 V	-1350 V
CH-	-1300 V	-1300 V

B.3 Errors

B.3.1 Errors List

The errors are listed below.

1) Major trouble errors

- Fuser error
- Fan error
- 2'nd tray communication error
- Toner lockout

2) Recoverable errors

- Cover open
- 2'nd tray route open
- Paper size error
- Face-up route open
- No cassette in 2'nd tray
- Paper exit jam
- Drum setting error
- No paper in 1'st cassette
- Paper transport system error
- No paper in 2'nd cassette
- Paper supply error

3) Alarms (warning)

- Low toner
- Paper width error
- Drum life expired

Note: 1. The major trouble errors do not recover after an error has been removed unless a reset is not performed.
2. A recoverable error resets automatically by itself once the cause of error has been removed. Printing is not possible while an error is existing.
3. The alarm serves as a warning only and the printing operation is performed.

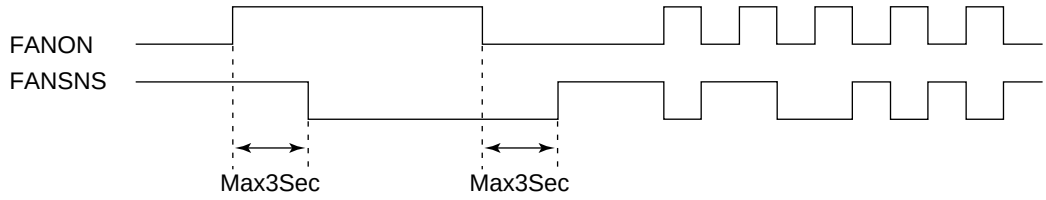
B.3.2 Major Trouble Errors

B.3.2.1 Fuser Error

The fuser error indicates an error in thermister on heater.
In case the fuser error occurs at the time of printing, the heater is turned off soon but the printing continues of that page.
However, if the error occurs before the write sensor is turned on, the motor stops soon.

B.3.2.2 Fan Error

The fan error is generated when the FANSNS signal lead goes "1" while the fan is running at full speed. Operation of the FANSNS signal when the fan is turned on is described below.



Since the fan alarm is not monitored during printing, the fan alarm does not appear from the moment the printing is started until the completion of printing operation.
In other words, the printing will continue even if the fan alarm occurs during printing.

B.3.2.3 Paper Feed Monitoring

Status	Description and Supervising Sensor	Distance
Paper supply error	Indicates monitoring error in hopping. Hopping is retried 3 times.	118 mm or less path Length +36 (hopping) x 3
Transport system jam 1	Indicates an error in the paper transport path. Error on resist roller section. From resist ON to write sensor (PS2) ON.	30 mm or less Inlet ~ write +20
Transport system jam 2	From inlet sensor OFF up to write sensor OFF.	44 mm or less
Transport system jam 3	Indicates an error in the paper transport system. Error of transfer roller and/or heat roller. From write sensor ON to outlet sensor ON.	207 mm or less Write ~ outlet +69
Paper size error	Indicates paper size other than specified one. From resist ON to inlet sensor OFF.	Recording paper +/- 45 mm
Paper outlet jam 1	Supervises slipping of the recording paper. From outlet sensor ON to OFF.	Recording paper +/- 45 mm
Paper outlet jam 2	Supervises jamming at the near paper outlet. From outlet sensor ON to OFF. When a crumpled recording paper is detected, the outlet sensor is set to "OFF" earlier than usual.	135 mm or less: NG

B.3.2.4 2'nd Tray Communication Error

This error is generated if on sending a command to the 2'nd tray is returned no-status (90 ms) or an undefined status. However, in case there is no status when reset, it will be considered that the 2'nd tray is not mounted.

B.3.2.5 Cover Open

Cover open sensor "0" indicates an open cover.
When the cover is closed the CU (control unit) section sends the reset signal and processes in the same way as if the power has been turned on.

B.3.3 Recoverable Errors

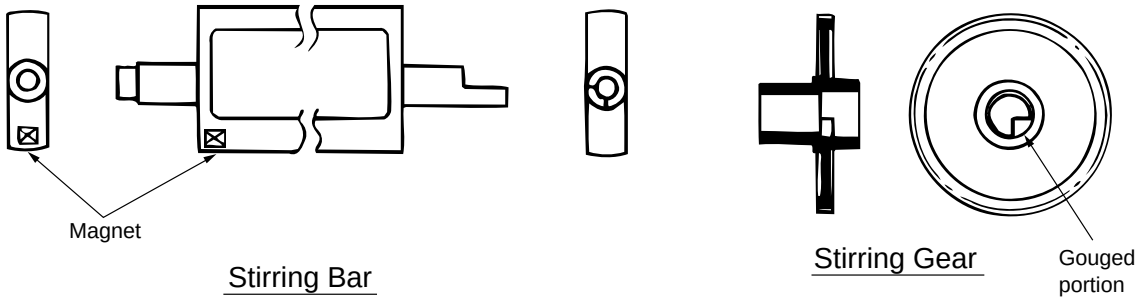
The three recoverable errors are listed in the table below.

Status	Description and Supervising Sensor
2’nd tray route open	Paper supply route from the option 2’nd tray to the main body is open, recording paper of the 1’st tray is being replaced.
No paper in 1’st cassette	No paper has been detected by the 1’st tray’s paper sensor. No paper has been detected by paper sensor in "1" state.
No paper in 2’nd cassette	Response from the option tray indicated no paper in 2’nd tray.

B.3.3.1 Toner Low Detection

• Composition
The device consists of the stirring gear which rotates at a constant rate, the stirring bar and the magnet on the stirring bar. The stirring bar rotates through the link on the protrusion in the stirring gear.

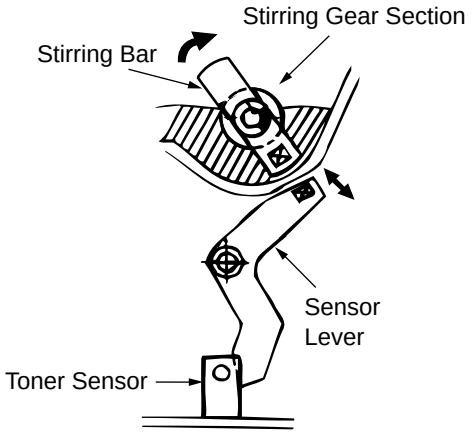
The configuration of stirring bar in the figure below may differ. The principle of toner detection, however, remains the same.



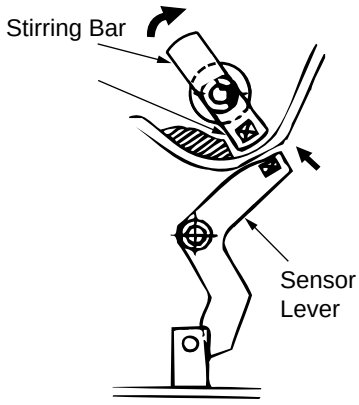
• Operation
Toner Low is detected by monitoring the time interval between the encounter of the magnet set on the sensor lever and the magnet on the stirring bar.

Operation during toner full state
• The stirring bar rotates due to interlocking with the stirring gear.

• Even when the magnet on the stirring bar reaches the maximum height, since the other side is being dipped in the toner, the stirring bar is pushed by the stirring gear.



Operation during toner low state
• When the stirring bar reaches the maximum height, since there is no resnstance provided by the toner on the other side, it falls to the minimum height due to its own weight. Because of this, the time interval during which it is in encounter with the magnet of the sensor lever becomes long. By monitoring this time interval, toner low can be detected.

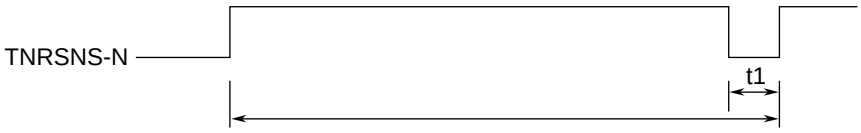


Low Toner Alarm

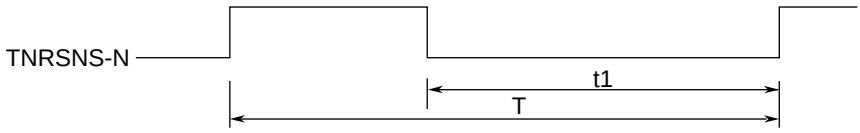
A check for low toner is carried out at all times when the drum is rotating (rotation in opposite direction is excluded).

• The toner sensor is not monitored while the drum motor is in halt.

TONER FULL state



TONER LOW state



• When the toner low state is detected 2 times consecutively, Toner Low is established.

• When the toner full state is detected 3 times consecutively, Toner Low is cancelled.

• When there is no change with the toner sensor for 2 cycles (5.3 sec. x 2) or more, then the Toner Sensor Alarm is activated.

Printing Speed	T	t1 (Toner Exists)	Remarks
8 ppm	2.6 sec.	less than 800 msec.	

B.4 Other Special Cases

B.4.1 Manual Paper Feed

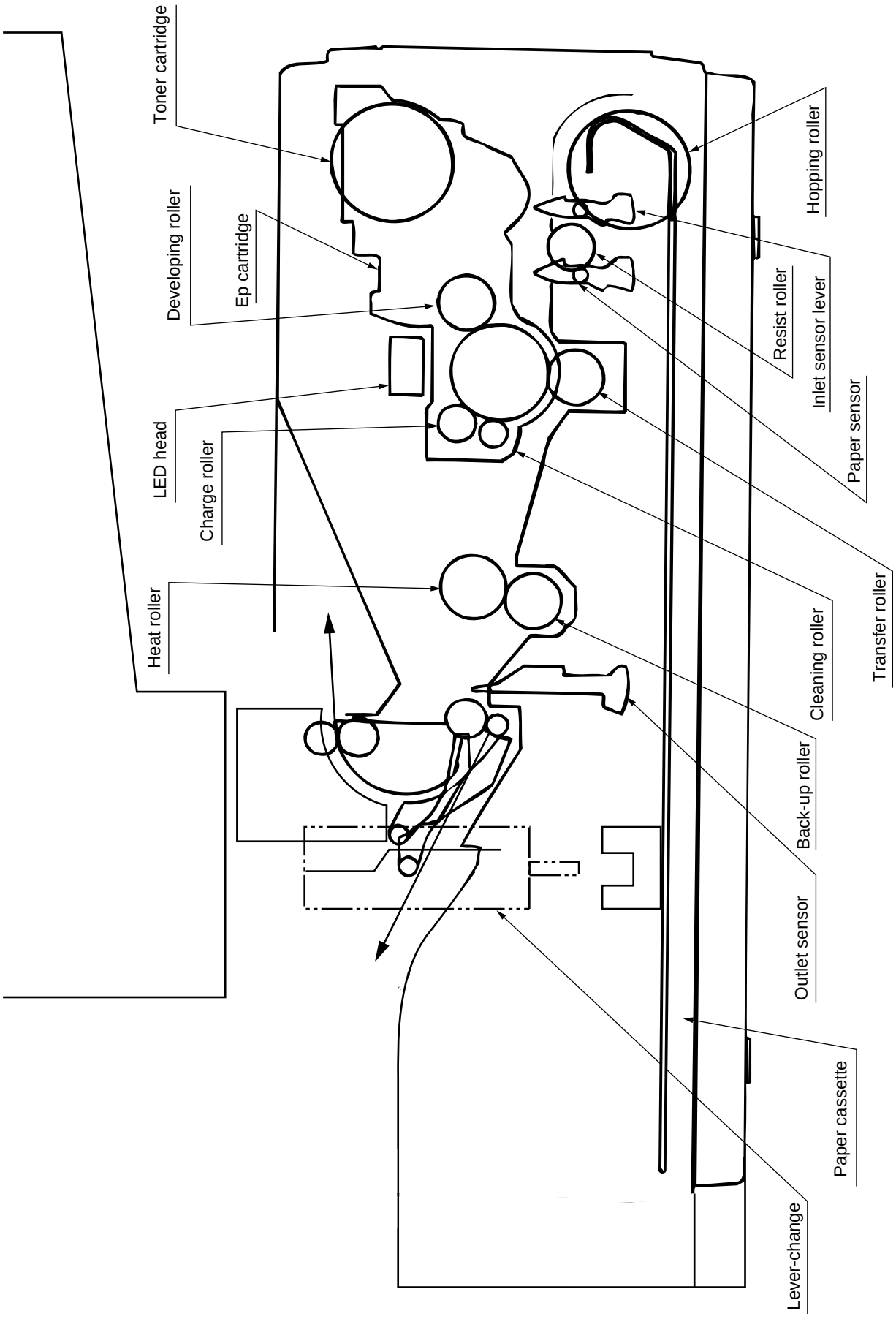
Turning on of the inlet sensors without the hopping operation indicates manual paper feeding for OKIFAX 5750/5950 (excluding when power is on).

B.4.2 Cleaning

The image drum needs cleaning since it gets dirty after having printed copies for a number of times.

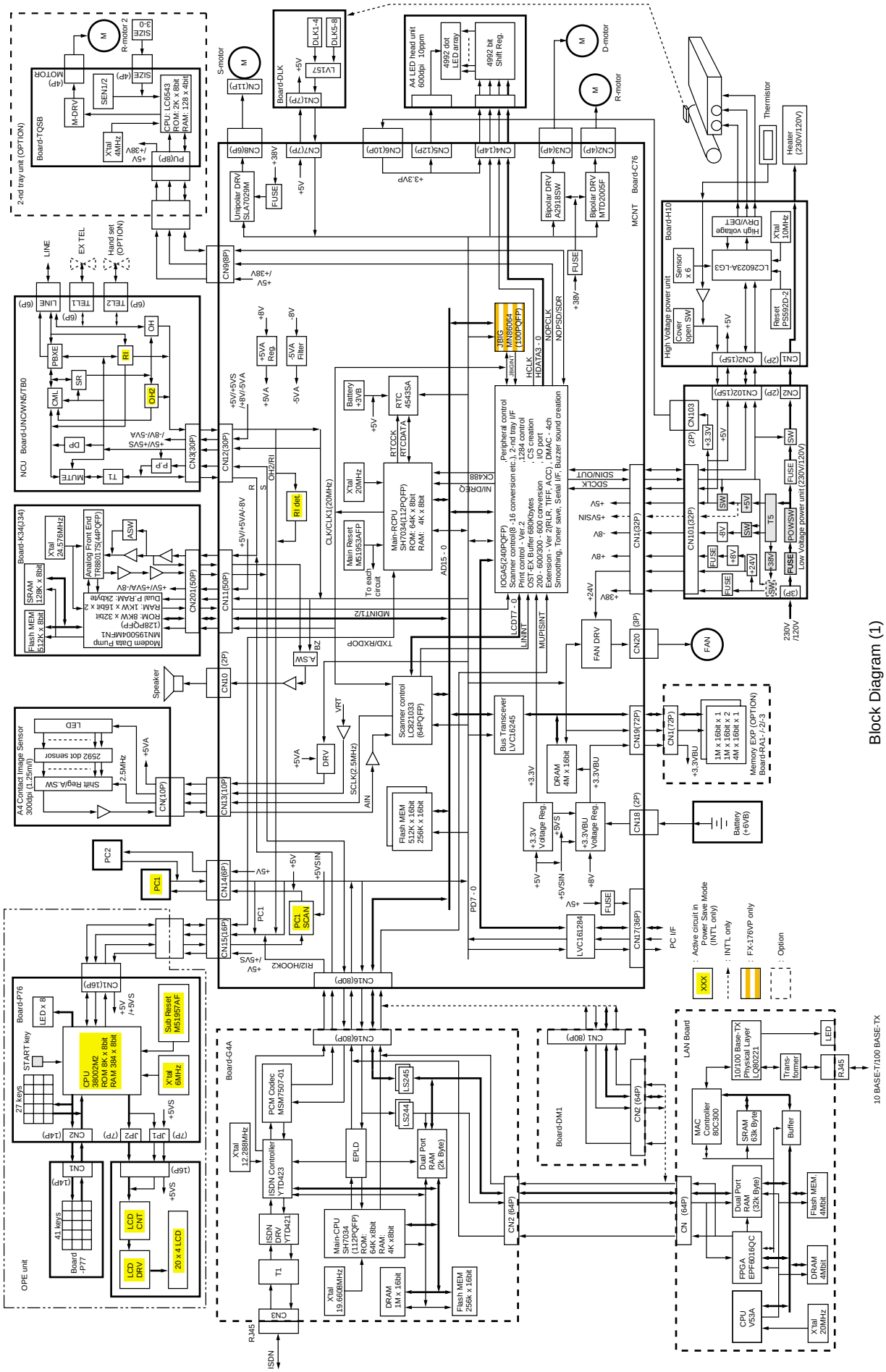
The two kinds of cleaning are listed in the table below:

Cleaning Type	Function	Remarks
Cleaning	This cleaning removes the toner whose electric potential is reversed due to poor electrification, or removes the toner whose electric potential is insufficient on the image drum surface. (Recovery of the toner to developing roller)	Cleaning is performed when the number of prints exceed 10 sheets or the one-job operation ends. (At the end of communication or copy operations)
CH (charge roller) cleaning	This cleaning removes the residual toner on the charging roller surface. The toner is removed by moving to the recording paper from charging roller and image drum.	User operation

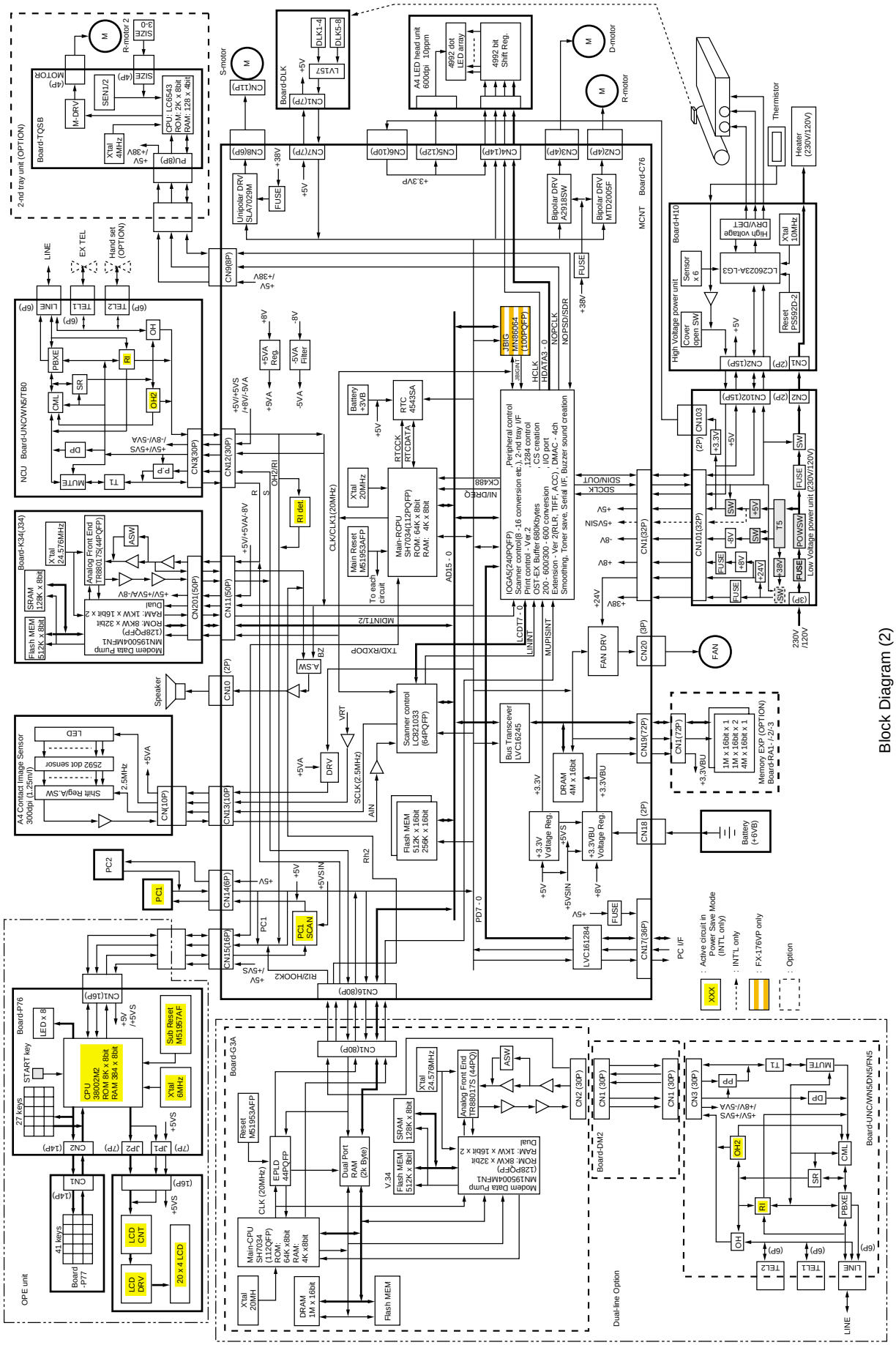

Toner cartridge
Developing roller
Ep cartridge
LED head
Charge roller
Heat roller
Hopping roller
Resist roller
Inlet sensor lever
Paper sensor
Transfer roller
Cleaning roller
Back-up roller
Outlet sensor
Paper cassette
Lever-change

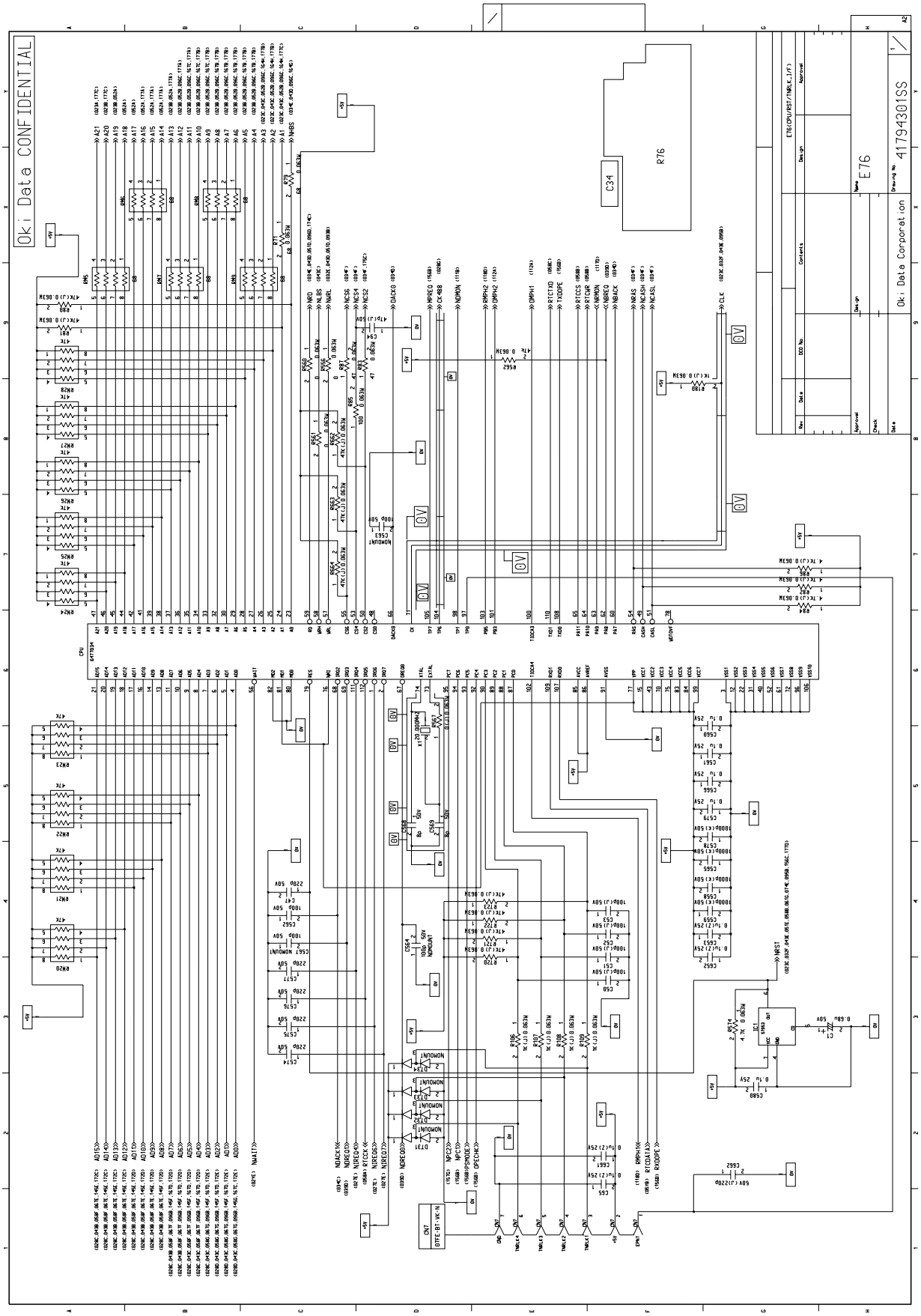
Appendix C CIRCUIT DIAGRAMS AND PARTS LIST

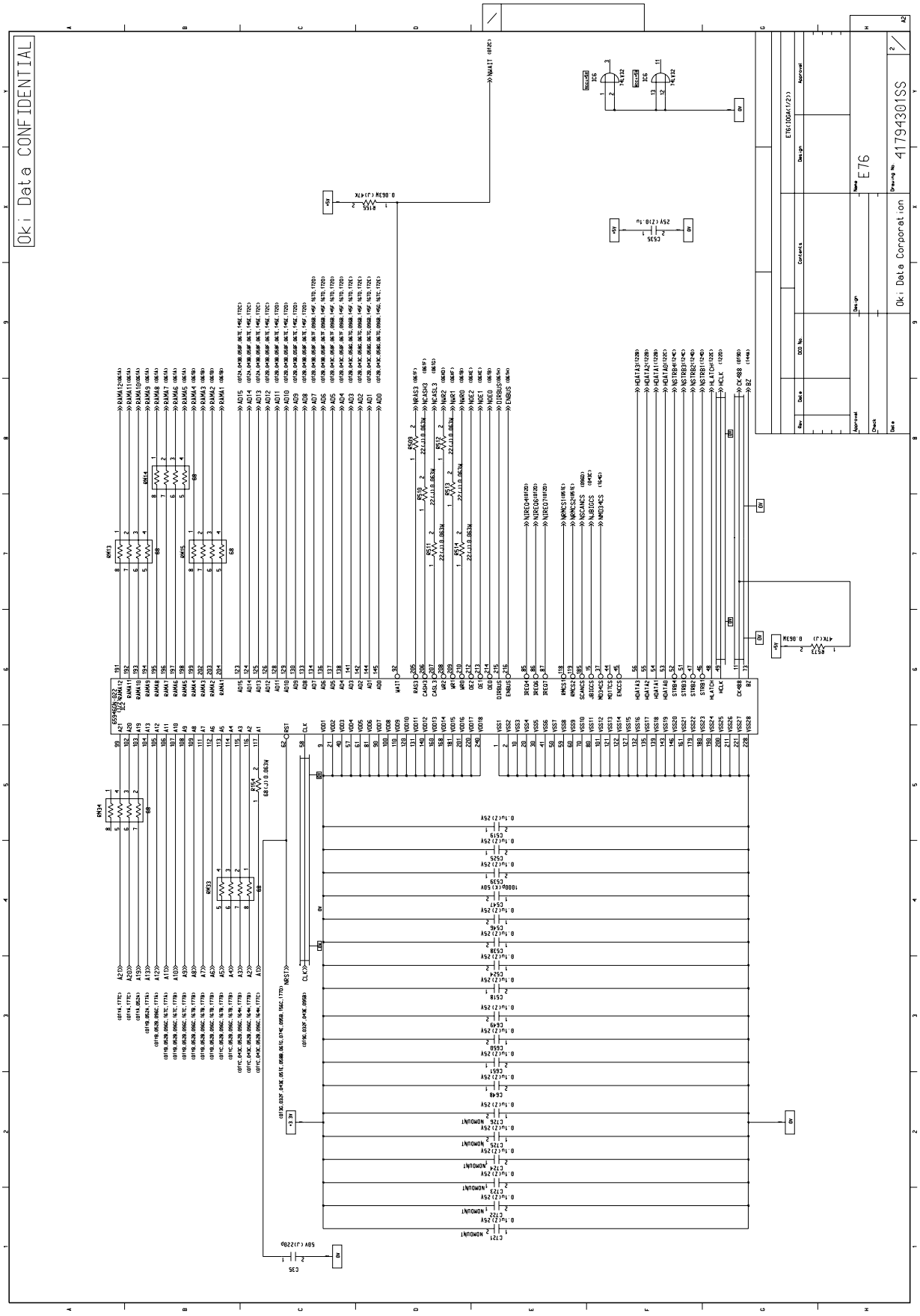
Board Name	Drawing	Drawing No.
E76	Circuit diagram	41794301SS
	Parts list (E76-)	41794301BT
	Parts list (E76-2)	41794302BT
H10	Circuit diagram	40660301SS
	Parts list	40660301BT
P76	Circuit diagram	40692001SS
	Parts list	40692001BT
P77	Circuit diagram	40717001SS
	Parts list	40717001BT
DLK	Circuit diagram	41264401SS
	Parts list	41264401BT
RA1 (option)	Circuit diagram	40691901SS
	Parts list (RA1-)	40691901BT
	Parts list (RA1-2)	40691902BT
	Parts list (RA1-3)	40691903BT
G4A (option)	Circuit diagram	40462701SS
	Parts list (G4A-2)	40462702BT
DM1 (option)	Circuit diagram	40692001SS
	Parts list	40692101BT
UNC	Circuit diagram	40002901SS
	Parts list (UNC-3)	40002903BT
WN5	Circuit diagram	40003001SS
	Parts list (WN5)	40003001BT
TB0	Circuit diagram	41777601SS
	Parts list (TB0)	41777601BT
MPW2520 (120V)	Circuit diagram	SIPS1360
	Parts list	JEPS-364
MPW2420 (230V)	Circuit diagram	SIPS1359
	Parts list	JEPS-365
TELU (option)	Circuit diagram	3SS5003-6262
	Parts list	4UT5003-6262Z001
TEL-W1 (option)	Circuit diagram	3SS3528-1006
	Parts list (ABX)	4UT3528-1006Z006
TEL-W2 (option)	Circuit diagram	3SS3528-1007
	Parts list (AB)	3UT3528-1007Z003
	Parts list (ABB)	3UT3528-1007Z004
TEL-W2D (option)	Circuit diagram	3SS3528-1016
	Parts list	3UT3528-1016Z005
TEL-W2F (option)	Circuit diagram	3SS3528-1035G007
	Parts list	4UT3528-1035Z007
NTIF (option)	Circuit diagram	3SS5003-6261
	Parts list	4UT5003-6261Z001
	Parts list	4UT5003-6261Z003
10KY (option)	Circuit diagram	3SS5003-6260
	Parts list	4UT5003-6260Z001
HOOK (option)	Circuit diagram	3SS5003-6263
	Parts list	4UT5003-6263Z001
2nd TQSB TRAY (option)	Circuit diagram	3SS5005-3362Z001
	Parts list	4UT5005-3362Z002
G3A (option)	Circuit diagram	41069601SS
	Parts list	41069601BT
DM2 (option)	Circuit diagram	41199701SS
	Parts list	41199701BT

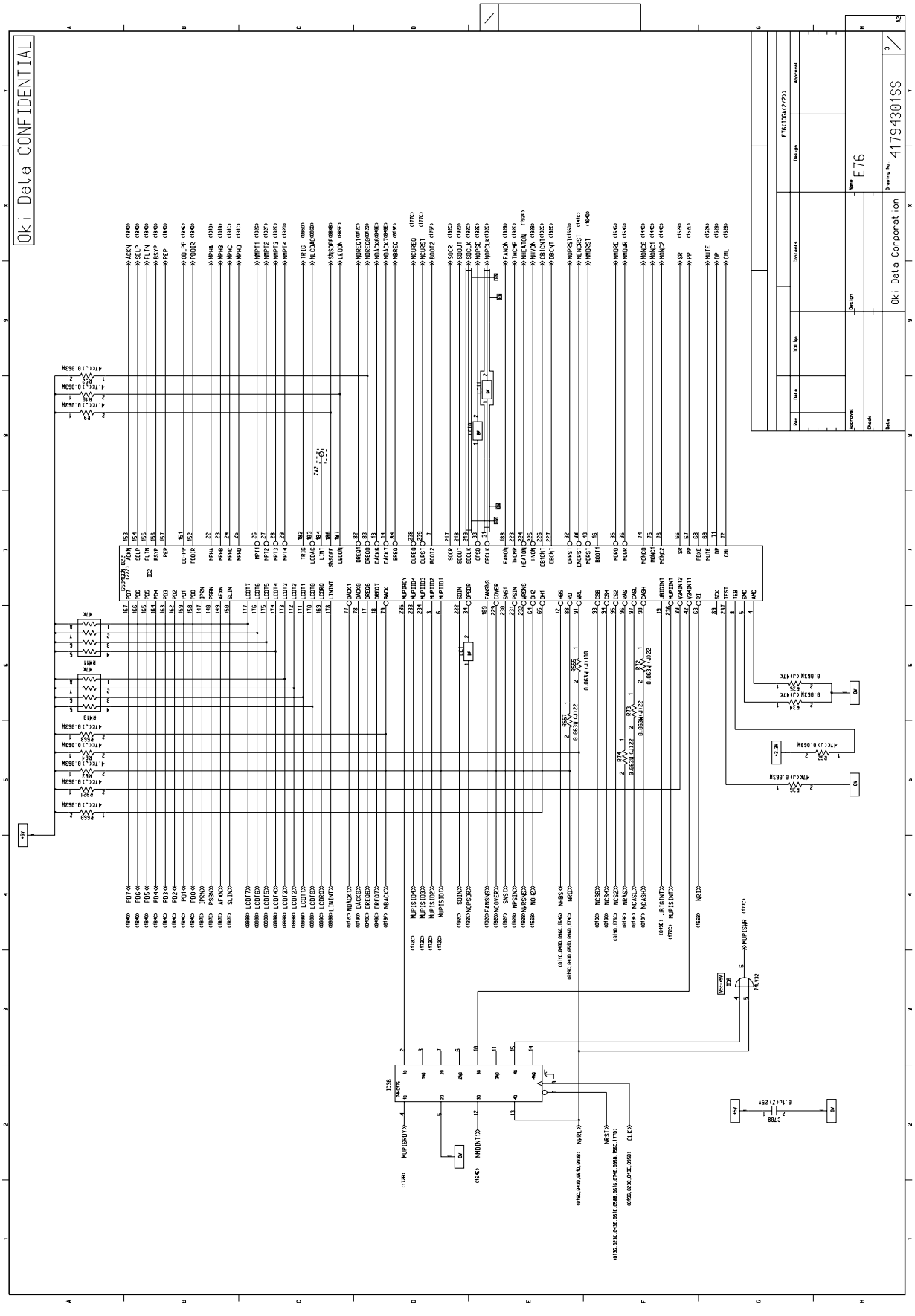


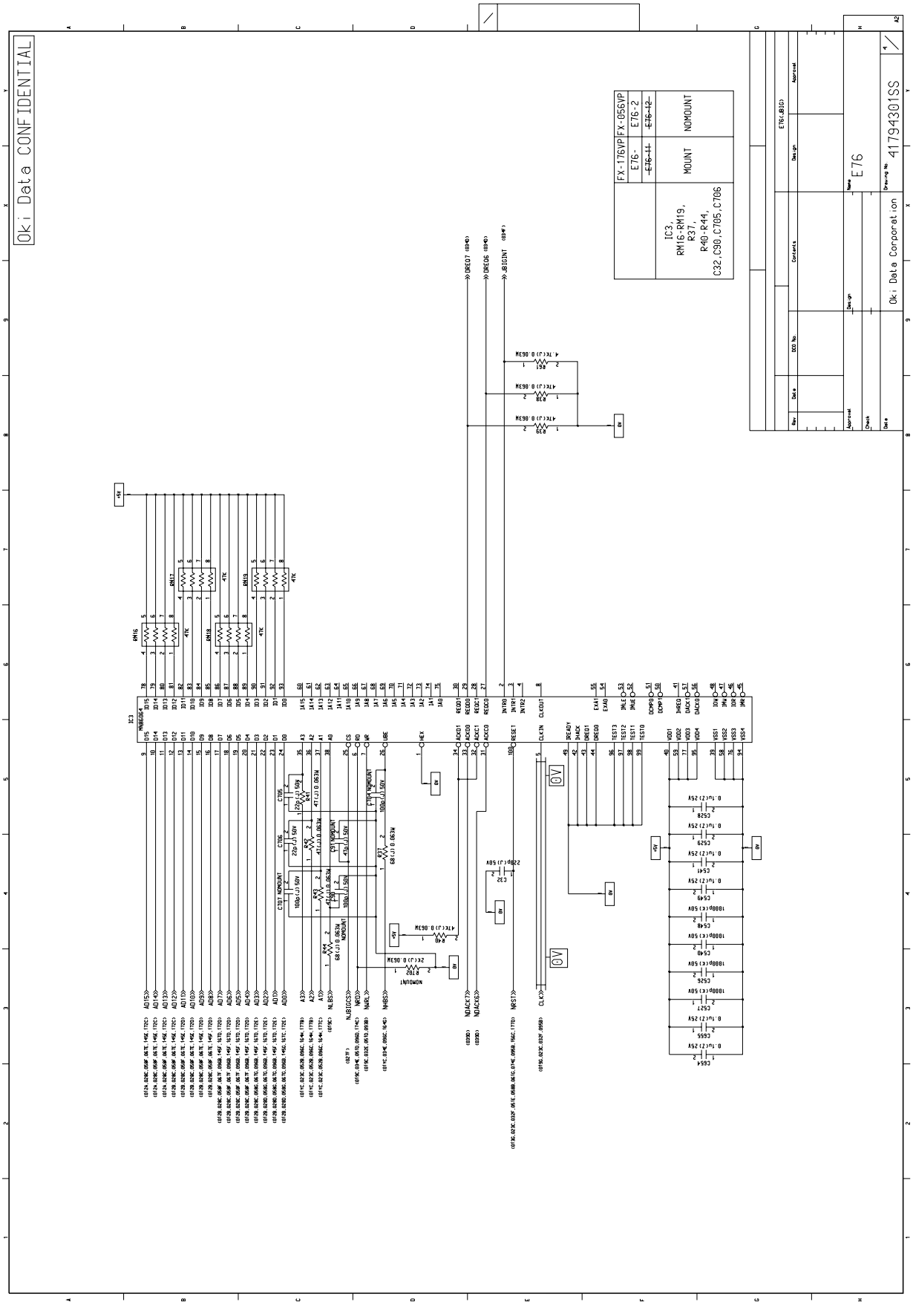
Block Diagram (1)

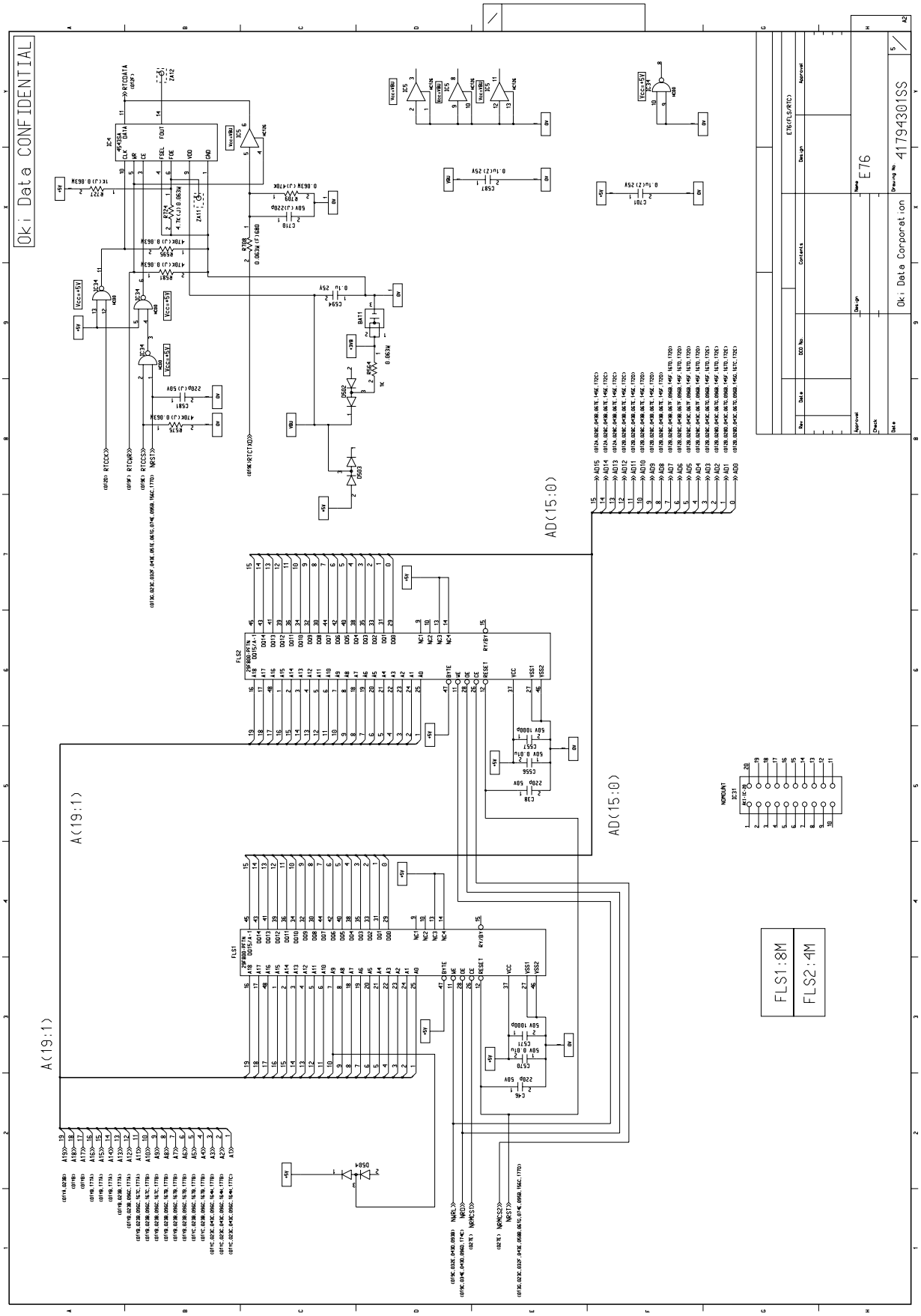

Block Diagram (2)
MCNT Board-C76
NCU Board-UNC/WN5/T80
Board-K34(J3A)
Board-P76
OPE unit
Board-G3A
Board-DM2
Dual-line Option
Board-UNC/WN5/DN5/FN5
Board-TQSB
2-nd tray unit (OPTION)
Board-DLK
Board-H10
High Voltage power unit
Low Voltage power unit (230V/120V)
Memory EXP (OPTION) Board-PA1 -/-2/-3
A4 Contact Image Sensor 300dpi (1.25mm)
A4 LED head unit 600dpi 10ppm
Main-RCPU SH7034(112PQFP) ROM: 64K x 8bit RAM: 4K x 8bit
Scanner control LC821033 (64PQFP)
Modem Data Pump MN19500AMFN1 (128PQFP) ROM: 8KW x 32bit RAM: 1KW x 16bit x 2 Dual
Analog Front End TR88017S(44PQFP)
Main-CPU SH7034 112QFP ROM: 64K x8bit RAM: 4K x8bit
CPU 38002M2 ROM 8K x 8bit RAM 384 x 8bit
Sub Reset M51957AF
Reset M51953AFP
Main Reset M51953AFP
EPLD 44PQFP
Dual Port RAM (2k Byte)
Flash MEM 512K x 16bit
Flash MEM 256K x 16bit
SRAM 128K x 8bit
DRAM 4M x 16bit
DRAM 1M x 16bit
Bus Transceiver LVC16245
LVC161284
Unipolar DRV SLA7029M
Bipolar DRV A2918SW
Bipolar DRV MTD2005F
FAN DRV
FAN
Thermistor
Heater (230V/120V)
Battery (+6VB)
Battery +3VB
RTC 4543SA
JBIG MN86064 (100PQFP)
Reset PS592D-2
LC72602A-L63
Sensor x 6
Cover open SW
Hard set (OPTION)
EX TEL
LINE
PC1
PC2
PC1 SCAN
Speaker
A.SW
BZ
VRT
DRV
AIN
SCLK(2.5MHz)
Rh2
R12/HOOK2
PD7 - 0
LCDT7 - 0
LINIT
MUPISINT
TXD/RXDOP
MDINT1/2
CLK/CLK1(20MHz)
NI/DREQ
CK48
AD15 - 0
HCLK
HDAT3 - 0
NOPCLK
NOPSD/SDR
SDCLK
SDIN/OUT
RTCCK
RTCDAT
Ri det
OH2/RI
PC I/F
Active circuit in Power Save Mode (INTL only)
INTL only
FX-176/P only
Option
41898401TH Rev.1a
535 /

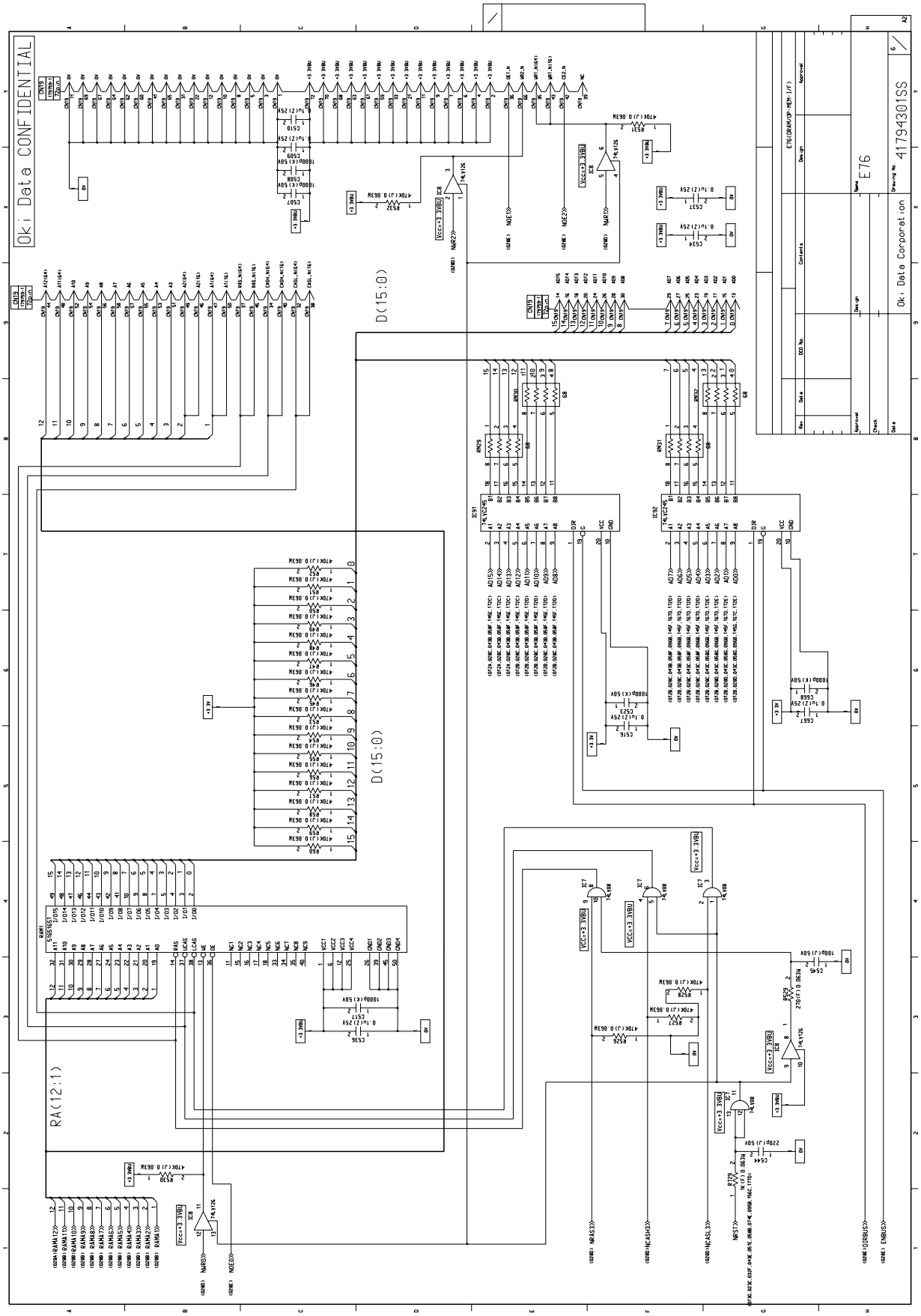

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
R76
C34

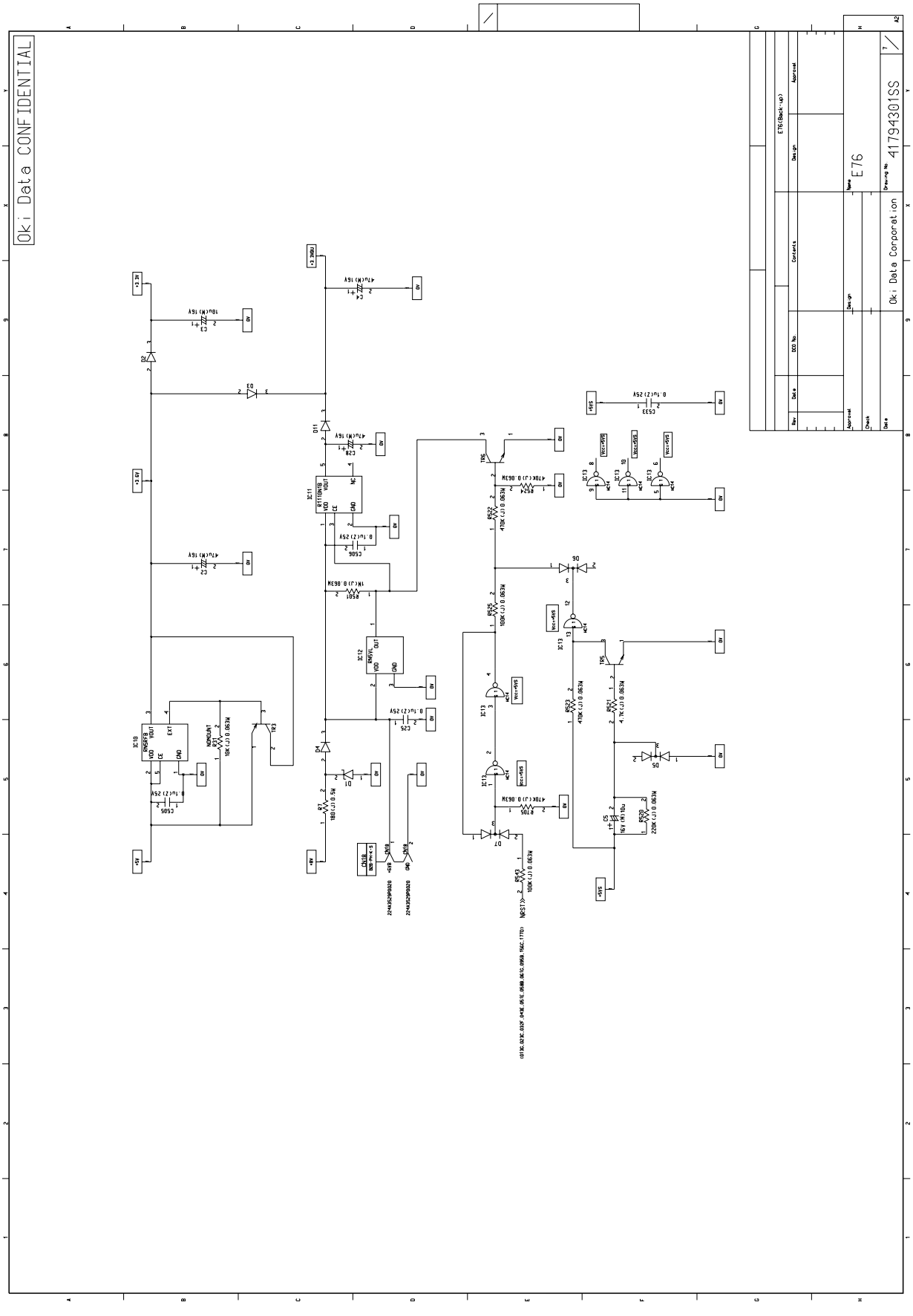

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

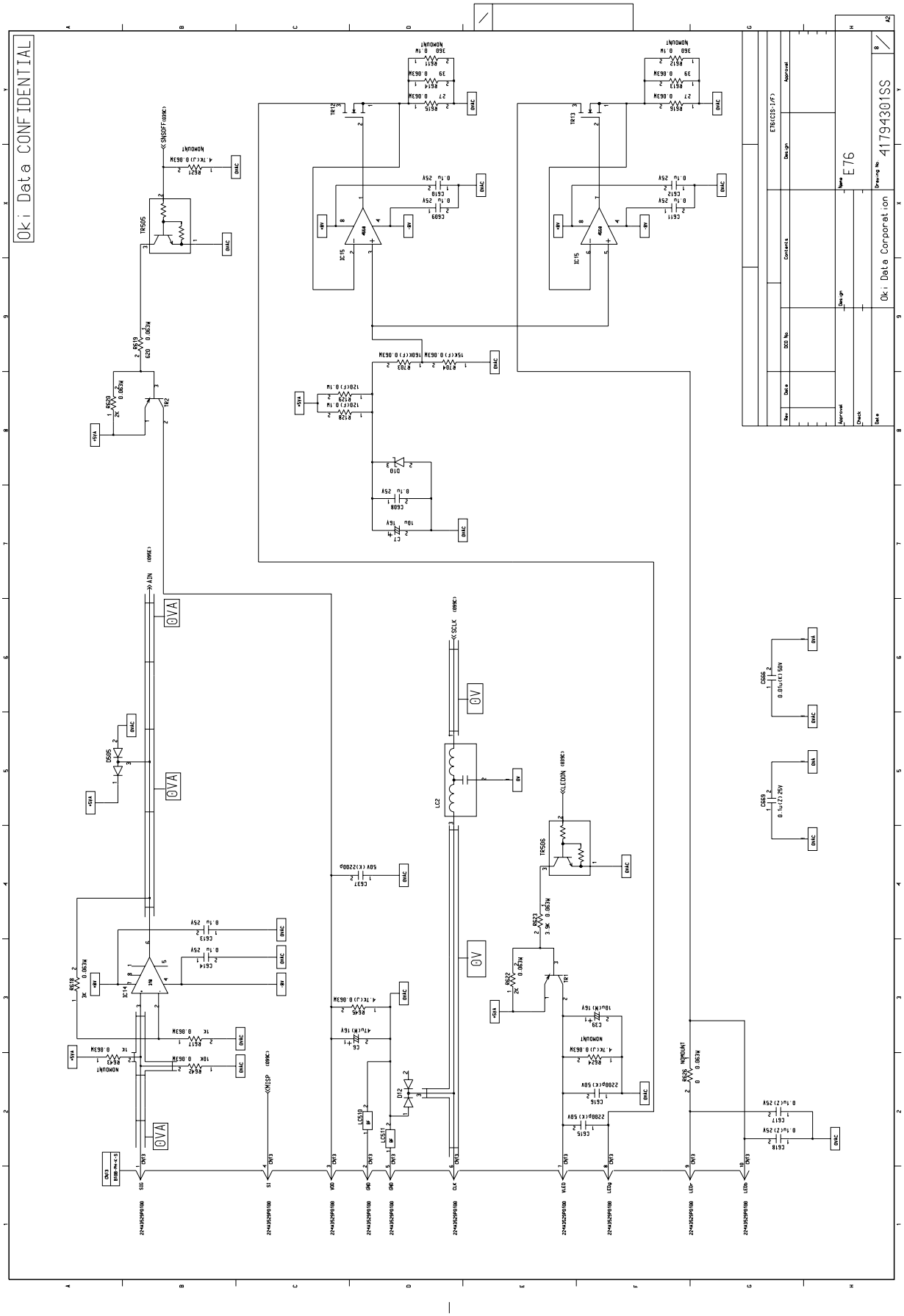

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

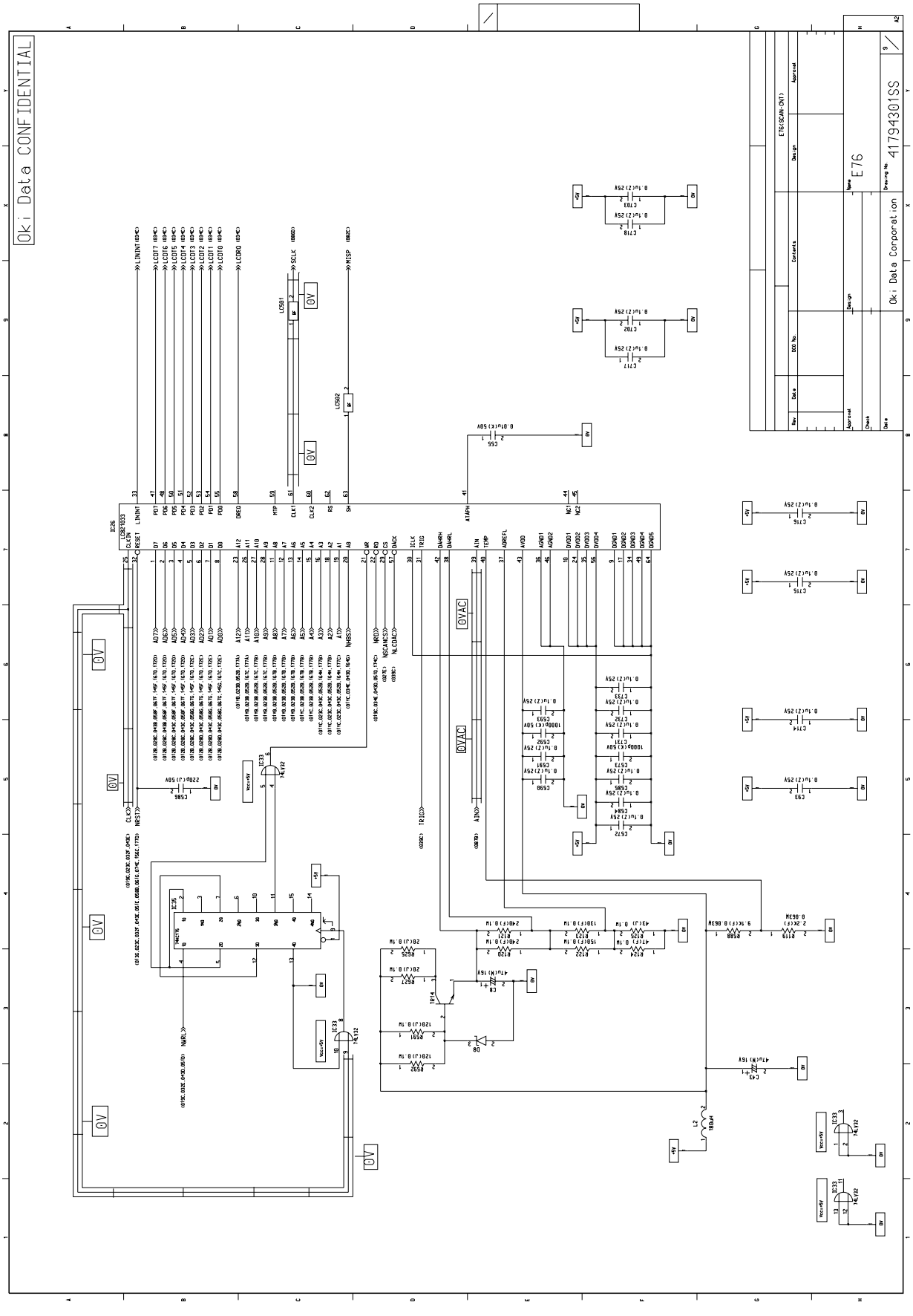

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
FX-176VP/FX-656VP
E76-
E76-2
E76-11
E76-12
MOUNT
NOMOUNT
IC3, RM16:RM19, R37, R40-R44, C32,C90,C705,C706

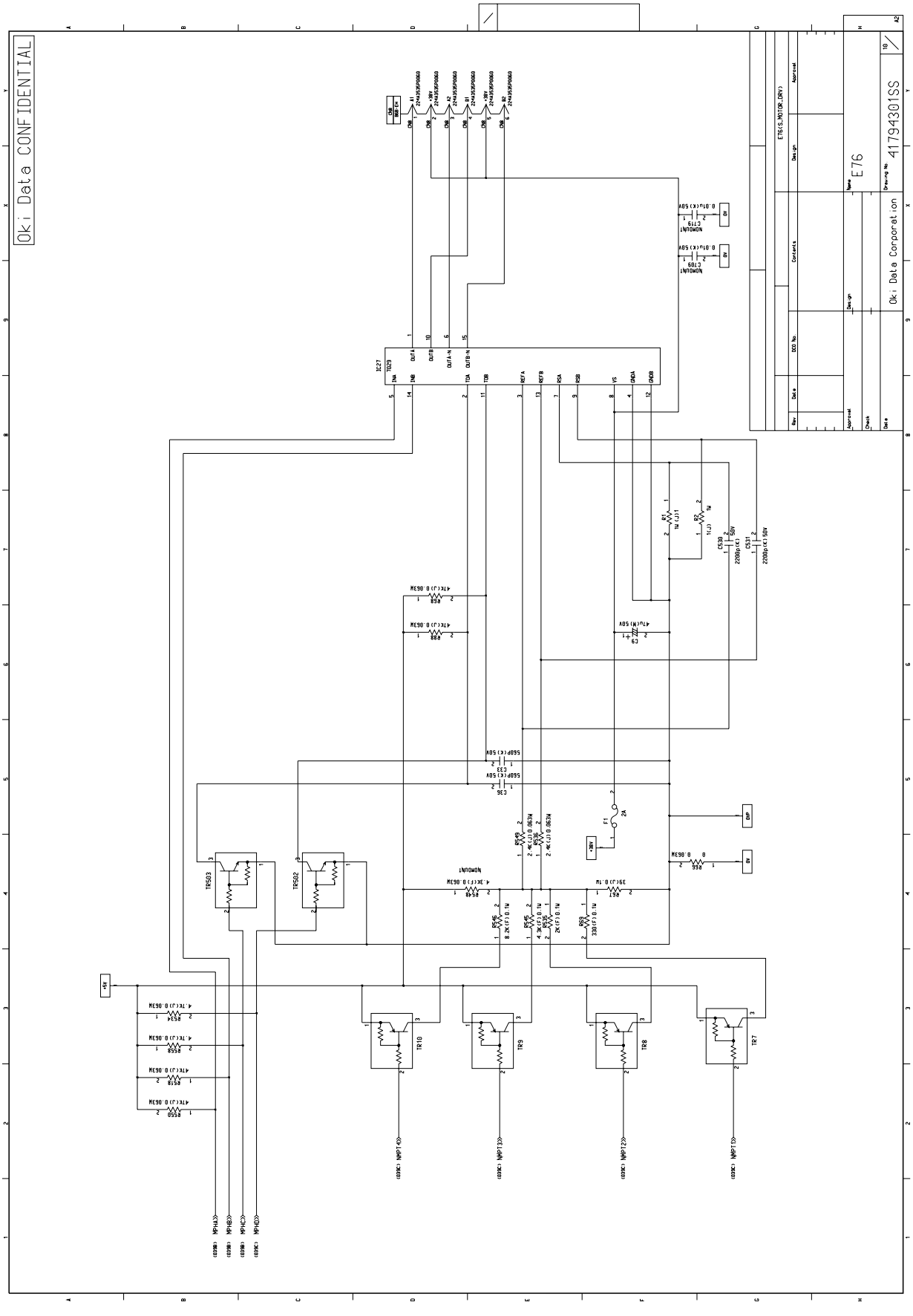

Oki Data CONFIDENTIAL
A(19:1)
AD(15:0)
FLS1:8M
FLS2:4M
Oki Data Corporation
E76
41794301SS

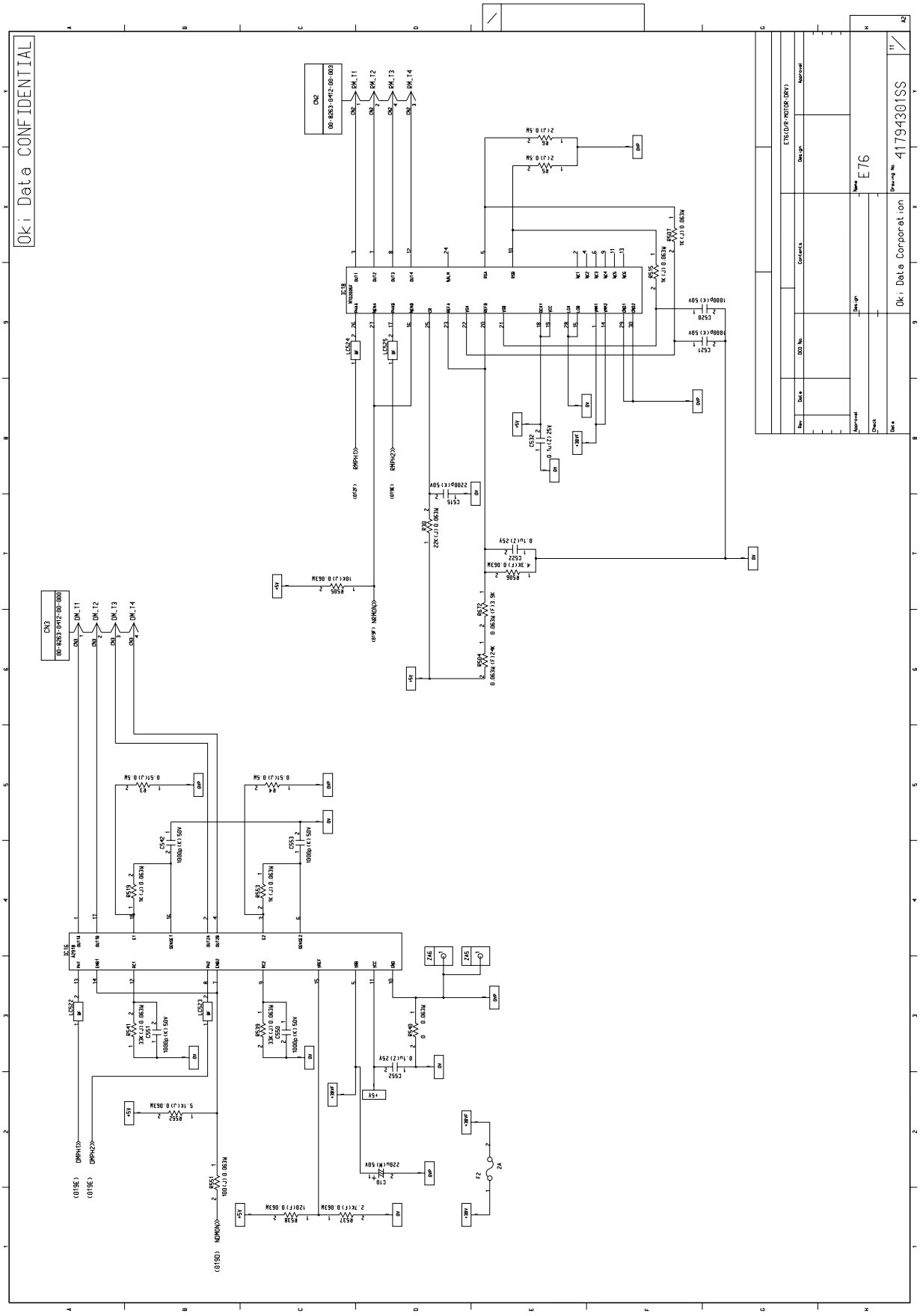

Oki Data CONFIDENTIAL
D(15:0)
RA(12:1)
Oki Data Corporation
E76
41794301SS

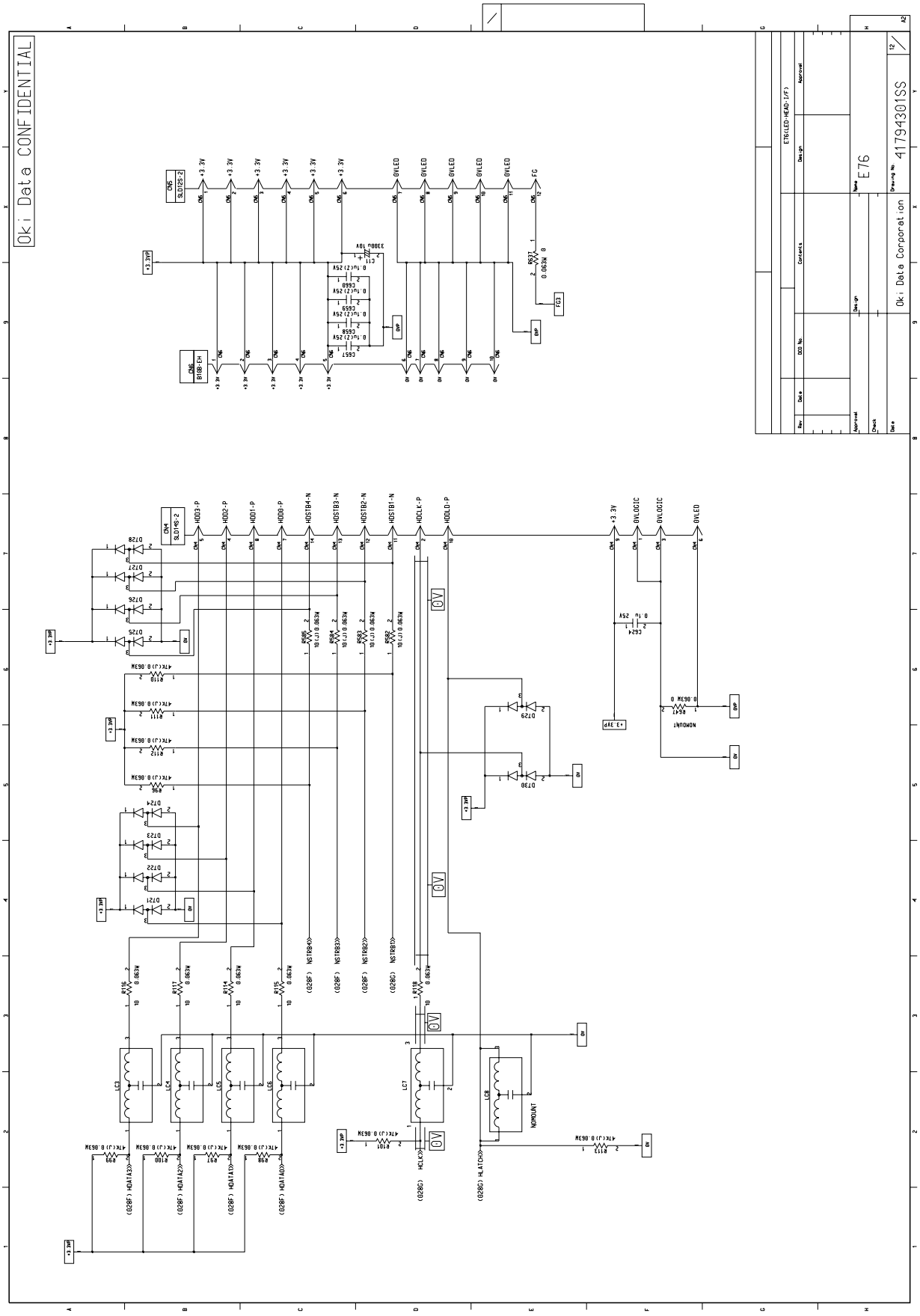

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

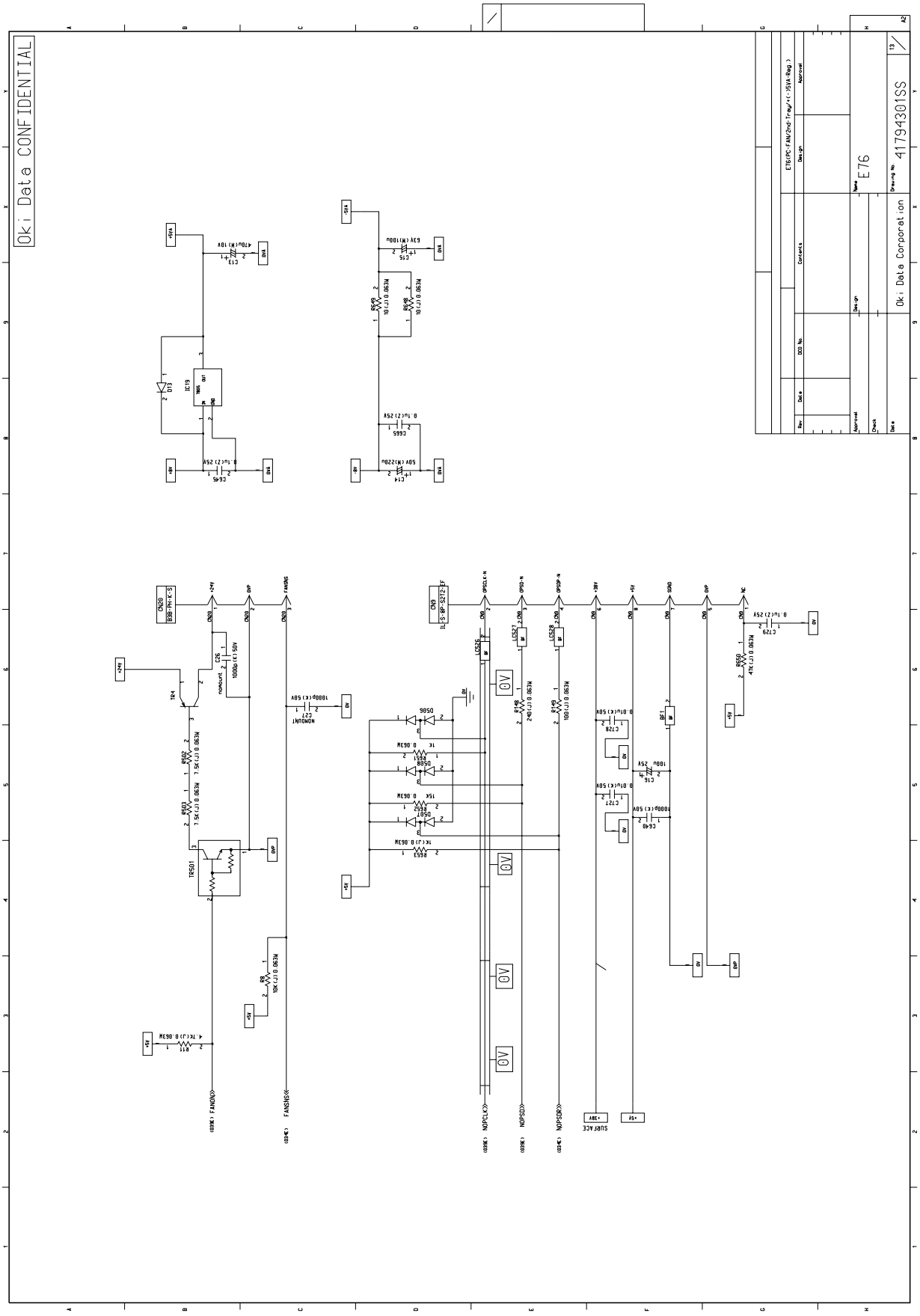

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

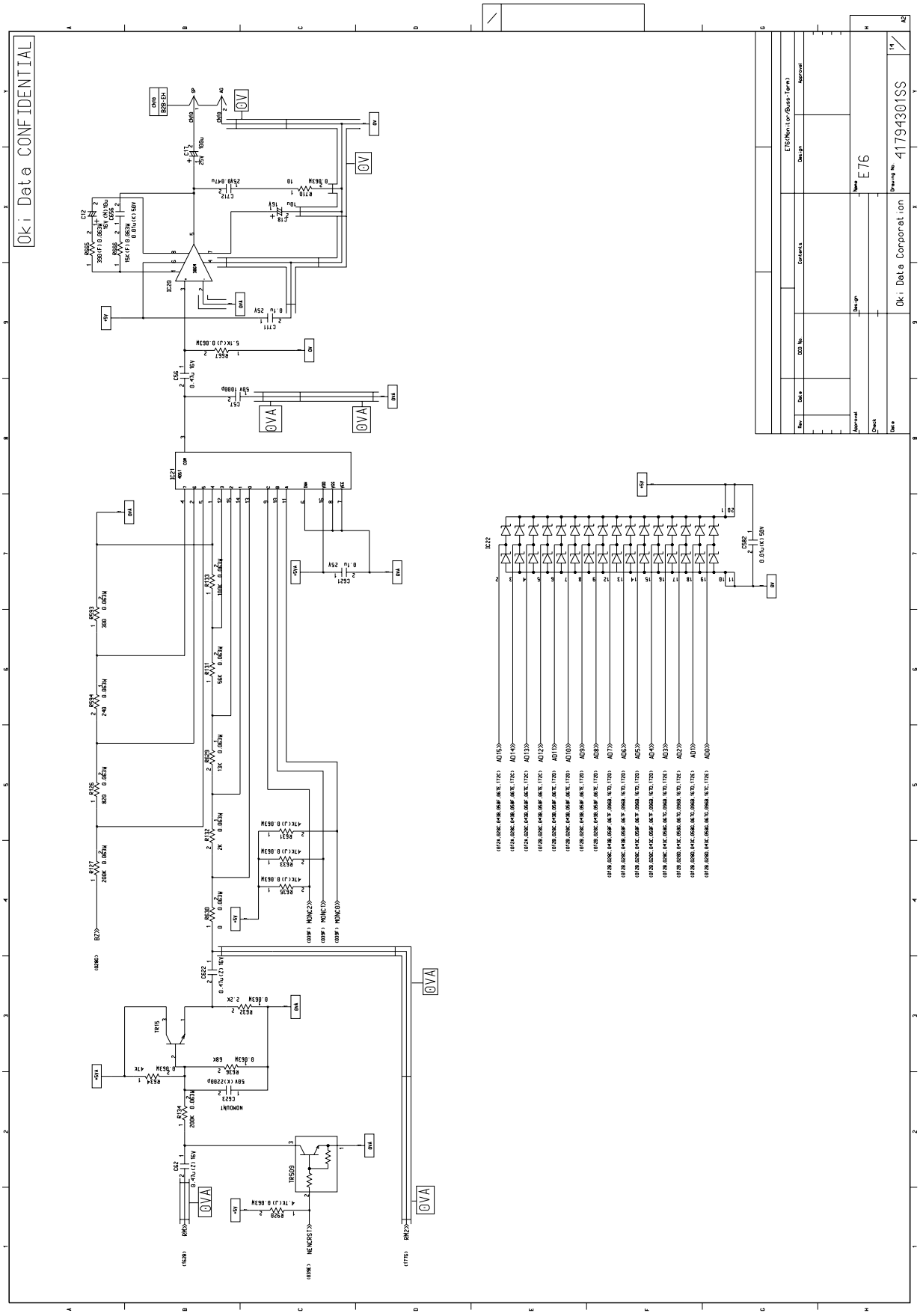

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

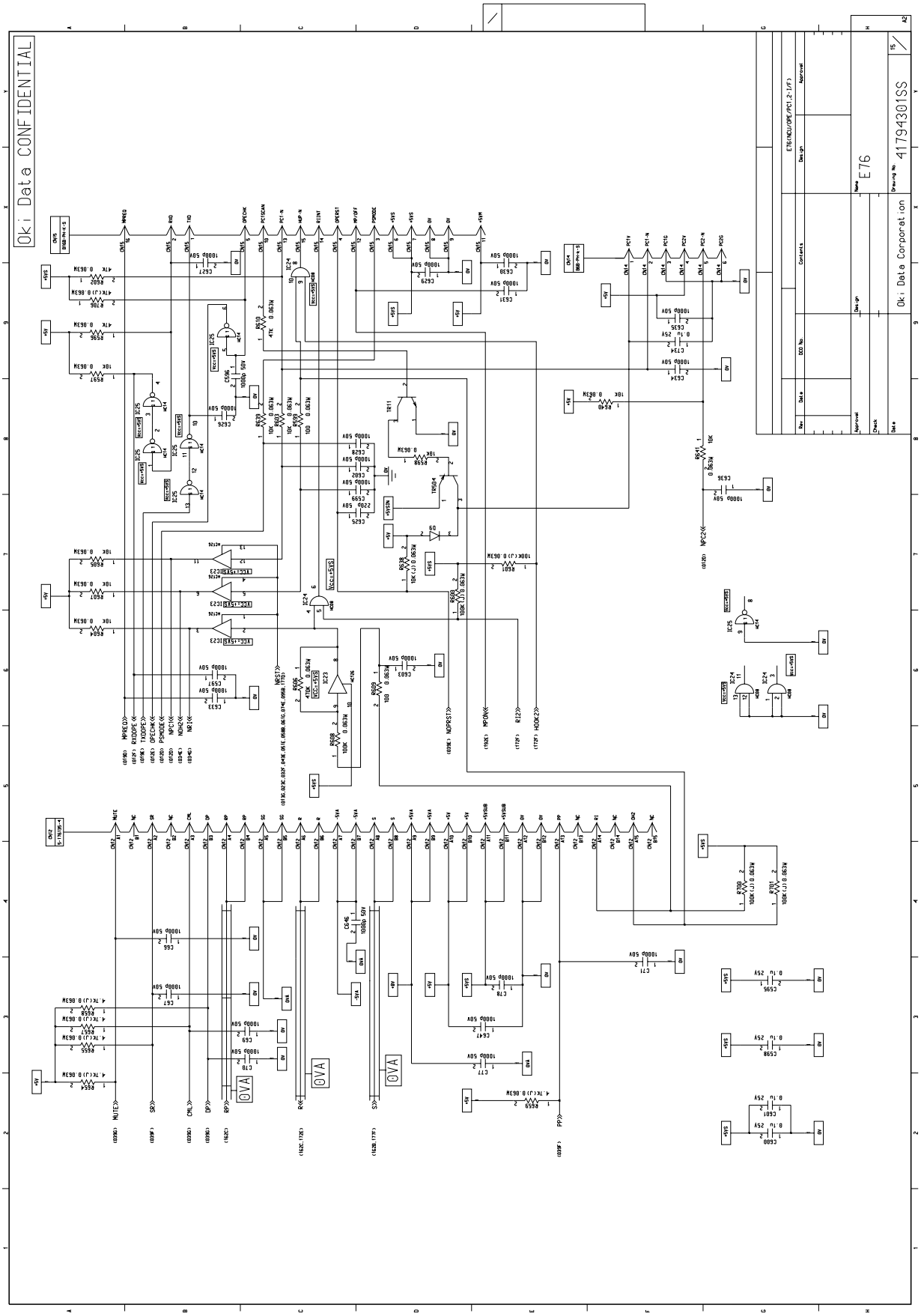

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
ET61S,MOTOR,DRV)
IC27
TD29
TR10
TR9
TR8
TR7
TR503
TR502
+5V
+30V
GND

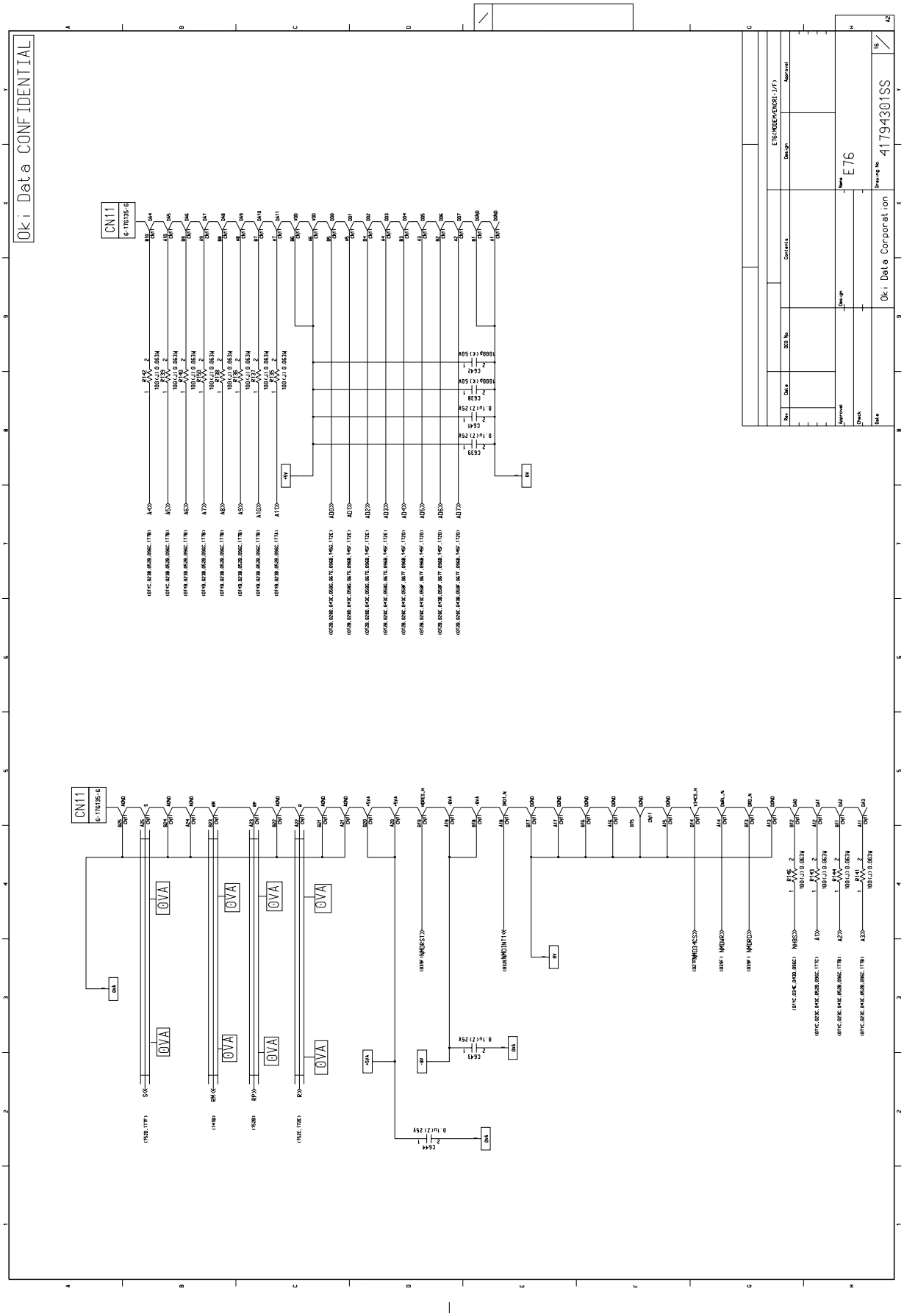

Oki Data CONFIDENTIAL
CN2
CN3
IC18
IC16
E76
Oki Data Corporation
41794301SS
ETB(DR-MOTOR-DRV)

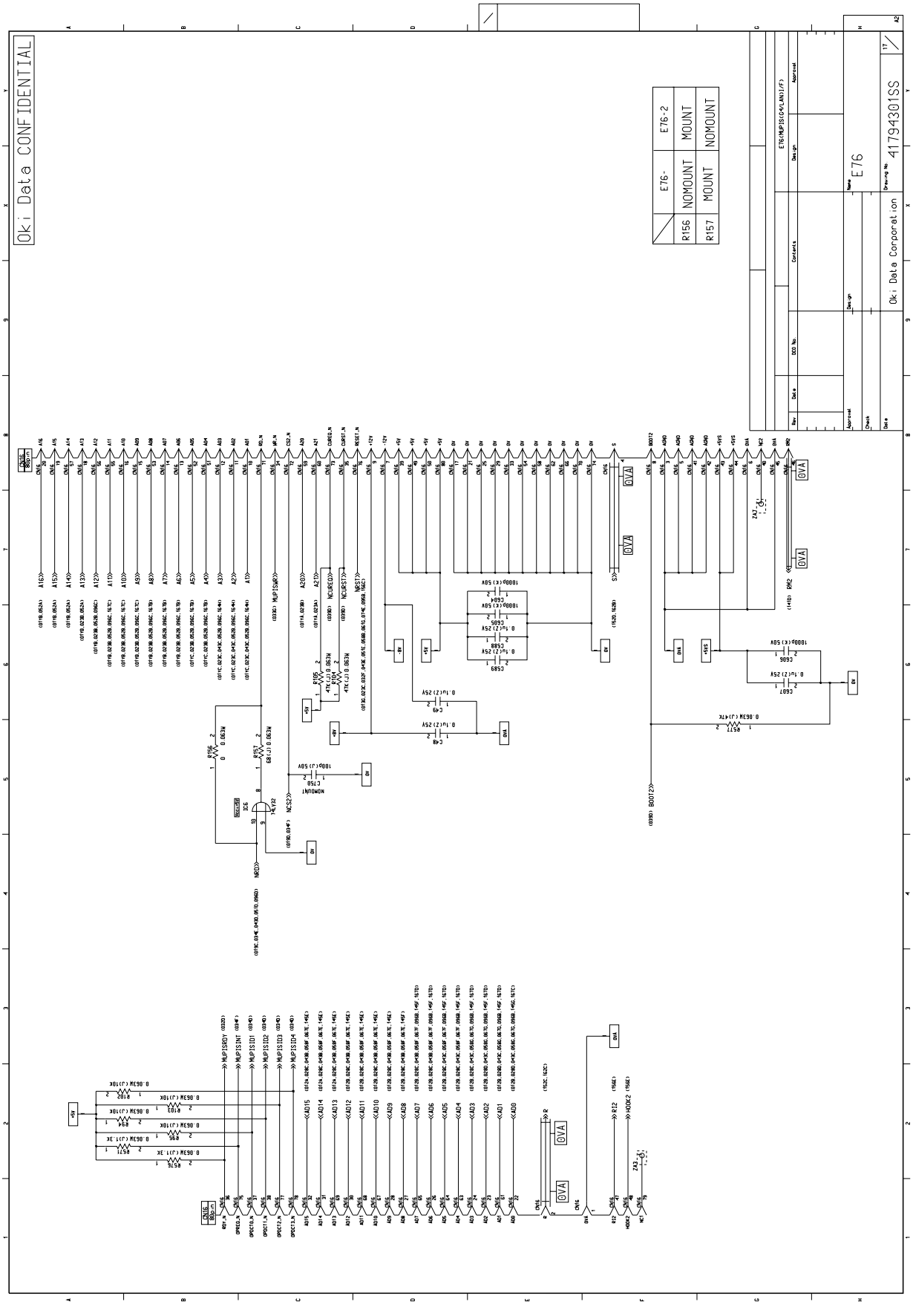

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
ETR(LED-HEAD-1/F)

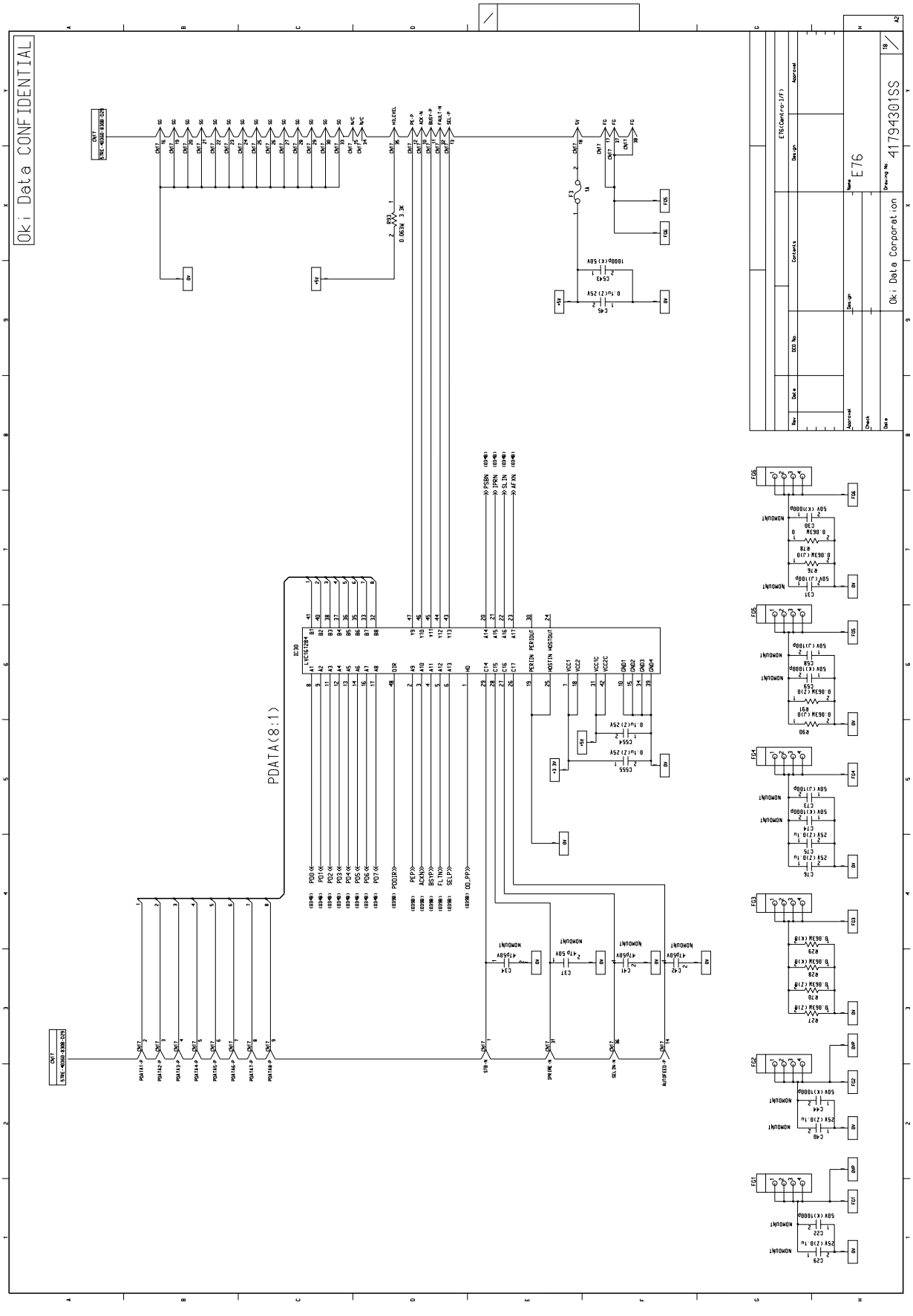

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
A2
13

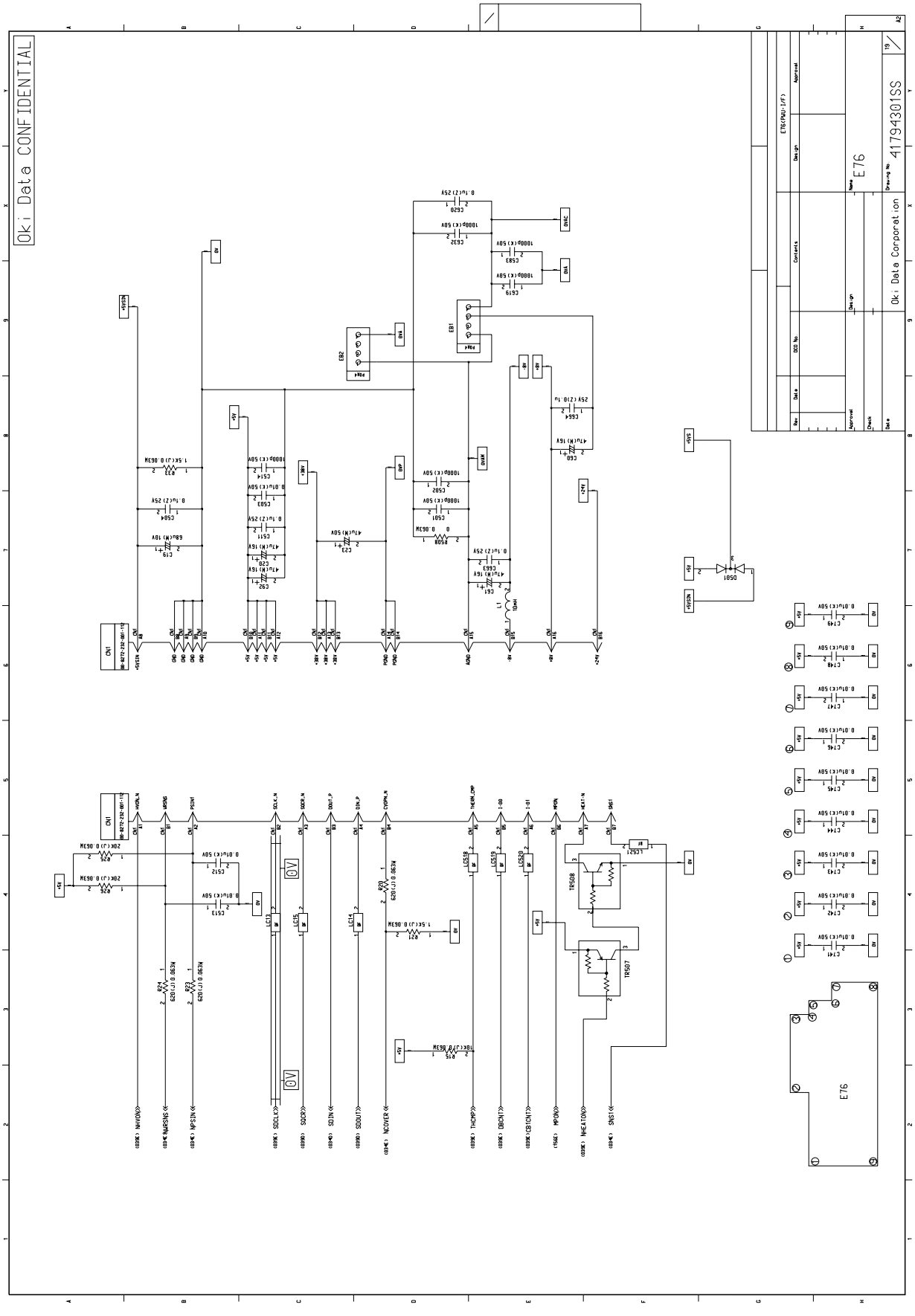

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS

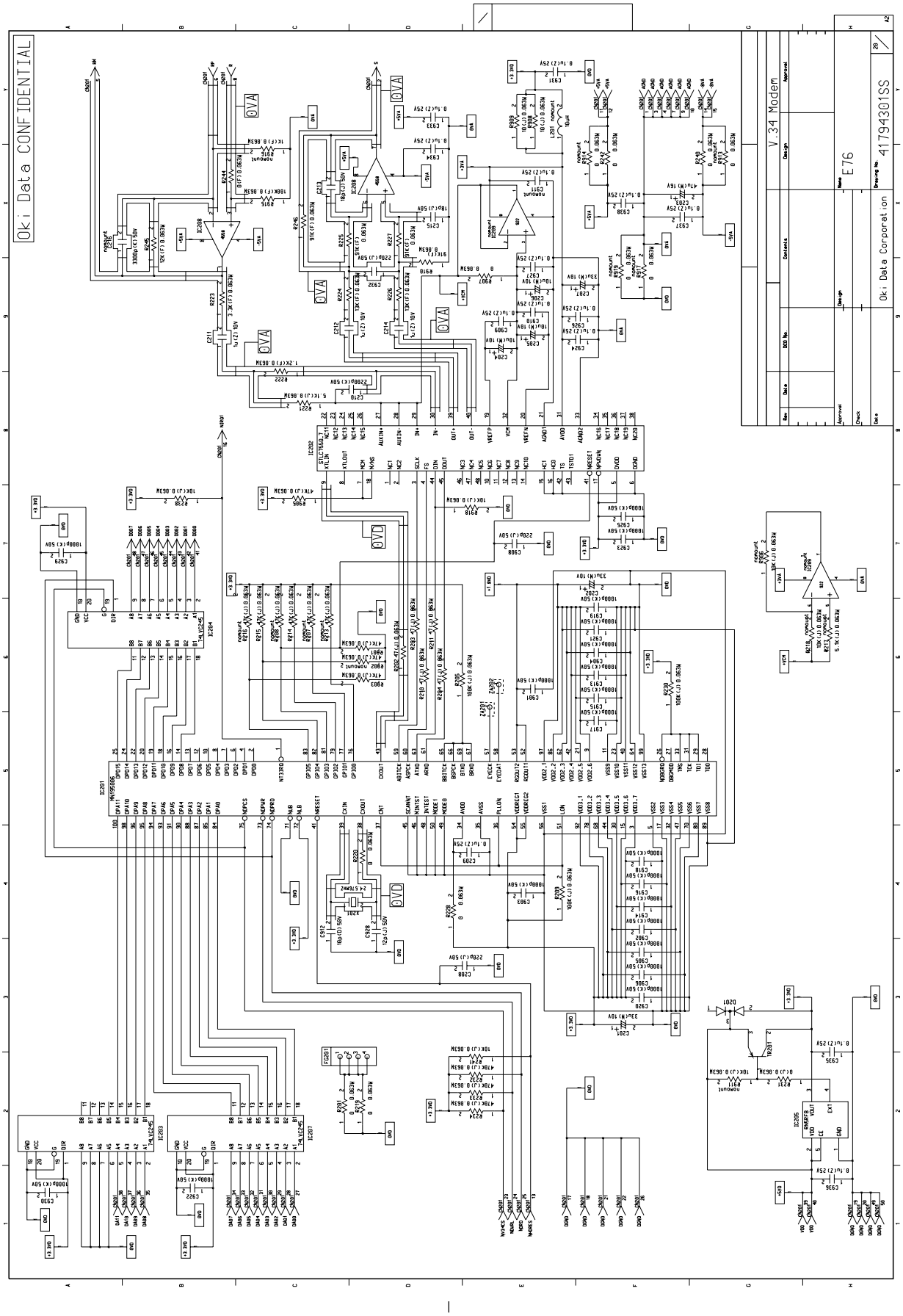

Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS
ET6(NCU/OPE/PC1.2-1/F)


Oki Data CONFIDENTIAL
CN11
6-176195-6
Oki Data Corporation
E76
41794301SS


Oki Data CONFIDENTIAL
E76-
E76-2
R156
NOMOUNT
MOUNT
R157
MOUNT
NOMOUNT
Oki Data Corporation
E76
41794301SS


Oki Data CONFIDENTIAL
PDATA(8:1)
Oki Data Corporation
E76
41794301SS


Oki Data CONFIDENTIAL
Oki Data Corporation
E76
41794301SS


Oki Data CONFIDENTIAL
V.34 Modem
E76
Oki Data Corporation
41794301SS

E76 PCB Assy (41794301BT) (1/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D12,D501	ISS392(TE85R) D-Signal -C	6110225N0001	2	
2	D5-D7,D201	SS100MA80VKCP D-Signal -C	611A0000N0002	4	
3	D502,D504,D505,D730	SS100MA80VSCP D-Signal -C	611A0000N0003	4	
4	D13	1S953/1S2075K/1S2473 D-Signal -	611A0003L0001	1	4KH-31051-102
5	D2-D4,D9,D11	1SS349 D-Signal -C	611A0225N0004	5	
6	D503,D506-D508,D721-D729	SB007T03C D-Signal -C	611A0232N0002	13	
7	D8,D10	RD4.7M-B2 D-Zenor -C	613A0233M0102B	2	
8	D1	RD6.2E-B3 D-Zener -	613A1231L0132C	1	4KH-31051-102
9					
10	R7	RD1/2Y180ohmJ RES-Carbon flm -	321A1431J0181	1	4KH-31051-102
11	R617,R729	CR/RK73H/ERJ/MCRF102 RES-MET RN -C	3235003F0102	2	
12	R642	CR/RK73H/ERJ/MCRF103 RES-MET RN -C	3235003F0103	1	
13	R133,R915	CR/RK73H/EJR/MCRF104 RES-MET RN -C	3235003F0104	2	
14	R538	CR/RK73H/ERJ/MCRF121 RES-MET RN -C	3235003F0121	1	
15	R222	CR/RK73H/ERJ/MCRF122 RES-MET RN -C	3235003F0122	1	
16	R245	CR/RK73H/ERJ/MCRF123 RES-MET RN -C	3235003F0123	1	
17	R224,R226,R629	CR/RK73H/ERJ/MCRF133 RES-MET RN -C	3235003R0133	3	
18	R666,R704	CR/RK73H/ERJ/MCRF153 RES-MET RN -C	3235003F0153	2	
19	R703	CR/RK73H/ERJ/MCRF164 RES-MET RN -C	3235003F0164	1	
20	R132	CR/RK73H/ERJ/MCRF202 RES-MET RN -C	3235003F0202	1	
21	R127	CR/RK73H/ERJ/MCRF204 RES-MET RN -C	3235003F0204	1	
22	R119	CR/RK73H/ERJ/MCRF222 RES-MET RN -C	3235003F0222	1	
23	R594	CR/RK73H/ERJ/MCRF241 RES-MET RN -C	3235003F0241	1	
24	R504	CR/RK73H/ERJ/MCRF243 RES-MET RN -C	3235003F0243	1	

E76 PCB Assy (41794301BT) (2/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
25	R615,R616	CR/RK73H/ERJ/MCRF270 RES-MET RN -C	3235003F0270	2	
26	R529	CR/RK73H/ERJ/MCRF271 RES-MET RN -C	3235003F0271	1	
27	R537	CR/RK73H/ERJ/MCRF272 RES-MET RN -C	3235003F0272	1	
28	R593	CR/RK73H/ERJ/MCRF301 RES-MET RN -C	3235003F0301	1	
29	R618	CR/RK73H/ERJ/MCRF302 RES-MET RN -C	3235003F0302	1	
30	R223	CR/RK73H/ERJ/MCRF232 RES-MET RN -C	3235003F0332	1	
31	R613,R614	CR/RK73H/ERJ/MCRF390 RES-MET RN -C	3235003F0390	2	
32	R665	CR/RK73H/ERJ/MCRF391 RES-MET RN -C	3235003F0391	1	
33	R672	CR/RK73H/ERJ/MCRF392 RES-MET RN -C	3235003F0392	1	
34	R506	CR/RK73H/ERJ/MCRF432 RES-NET RN -C	3235003F0432	1	
35	R131	CR/RK73H/ERJ/MCRF563 RES-MET RN -C	3235003F0563	1	
36	R708	CR/RK73H/ERJ/MCRF681 RES-MET RN -C	3235003F0681	1	
37	R126	CR/RK73H/ERJ/MCRF821 RES-MET RN -C	3235003F0821	1	
38	R588	CR/RK73H/ERJ/MCRF912 RES-MET RN -C	3235003F0912	1	
39	R225,R227,R246,R910	CR/RK73H/ERJ/MCRF913 RES-MET RN -C	3235003F0913	4	
40	R114-R118,R582-R585, R648,R649,R710,R908, R909	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	14	
41	R85,R135-R144,R146, R149,R150,R551,R555, R599,R609	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	18	
42	R106-R109,R180,R507, R515,R519,R553,R564, R651,R653,R727	CR/RK73K/ERJ/MCRJ102 RES-NET RN -C	3235003J0102	13	
43	R8,R15,R94,R95, R102,R103,R238,R241, R505,R597,R598,R603-R605,R607,R638-R641, R918	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	20	
44	R205,R209,R230,R525, R543,R600,R601,R608, R700,R701	CR/RK73K/ERJ/MCRJ104 RES-MET RN -C	3235003J0104	10	
45	R501	CR/RK73K/ERJ/MCRJ105 RES-MET RN -C	3235003J0105	1	

E76 PCB Assy (41794301BT) (3/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
46	R571,R576	CR/RK73K/ERJ/MCRJ132 RES-MET RN -C	3235003J0132	2	
47	R21,R33	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	2	
48	R652	CR/RK73K/ERJ/MCRJ153 RES-MET RN -C	3235003J0153	1	
49	R620,R622	CR/RK73K/ERJ/MCRJ202 RES-MET RN -C	3235003J0202	2	
50	R25,R26	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	2	
51	R134	CR/RK73K/ERJ/MCRJ204 RES-MET RN -C	3235003J0204	1	
52	R72-R74,R509-R514, R557	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	10	
53	R632	CR/RK73K/ERJ/MCRJ222 RES-MET RN -C	3235003J0222	1	
54	R30	CR/R73K/ERJ/MCRJ223 RES-MET RN -C	3235003J0223	1	
55	R520	CR/RK73K/ERJ/MCRJ224 RES-MET RN -C	3235003J0224	1	
56	R148	CR/RK73K/ERJ/MCRJ241 RES-MET RN -C	3235003J0241	1	
57	R536,R549	CR/RK73K/ERJ/MCRJ242 RES-MET RN -C	3235003J0242	2	
58	R93	CR/RK73K/ERJ/MCRJ332 RES-MET RN -C	3235003J0332	1	
59	R539,R541	CR/RK73K/ERJ/MCRJ333 RES-MET RN -C	3235003J0333	2	
60	R623	CR/RK73K/ERJ/MCRJ392 RES-MET RN -C	3235003J0392	1	
61	R41-R43,R83,R87, R202-R204,R210,R211	CR/RK73K/ERJ/MCRJ470 RES-MET RN -C	3235003J0470	10	
62	R9-R11,R61,R63,R82,R84, R86,R521,R534,R558, R574,R645,R654,R655, R657-R659 ,R724,R920	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	20	
63	R34-R36,R38-R40,R62,R64, R68,R80,R81,R88,R92, R96-R101,R104,R105, R110-R113,R155,R214, R215,R518,R550,R562, R563,R573,R577,R596, R602,R610,R631,R633- R635,R650,R660,R662- R664,R706,R720-R723, R901,R903,R905,R921	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	55	
64	R45-R60,R232-R234, R522-R524,R526-R528, R530-R532,R575,R581, R595,R606,R705,R709	CR/RK73K/ERJ/MCRJ474 RES-MET RN -C	3235003J0474	34	

E76 PCB Assy (41794301BT) (4/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
65	R221,R552,R667	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	3	
66	R20,R23,R24,R619	CR/RK73K/ERJ/MCRJ621 RES-MET RN -C	3235003J0621	4	
67	R37,R44,R71,R79, R154,R157	CR/RK73K/ERJ/MCRJ680 RES-MET RN -C	3235003J0680	6	
68	R636	CR/RK73K/ERJ/MCRJ683 RES-MET RN -C	3235003J0683	1	
69	R502,R503	CR/RK73K/ERJ/MCRJ752 RES-MET RN -C	3235003J0752	2	
70	R128,R129	RM73B2A121F RES-MET RN -C	323A5003F0121	2	
71	R123	RM73B2A131F RES-MET RN -C	323A5003F0131	1	
72	R122	RM73B2A151F RES-MET RN -C	323A5003F0151	1	
73	R535	RM73B2A202F RES-MET RN -C	323A5003F0202	1	
74	R120,R121	RM73B2A241F RES-MET RN -C	323A5003F0241	2	
75	R69	RM73B2A331F RES-MET RN -C	323A5003F0331	1	
76	R545	RM73B2A432F RES-MET RN -C	323A5003F0432	1	
77	R124	RM73B2A470F RES-MET RN -C	323A5003F0470	1	
78	R546	RM73B2A822F RES-MET RN -C	323A5003F0822	1	
79	R591,R592	RM73B2A121J RES-MET RN -C	323A5003J0121	2	
80	R625,R627	RM73B2A200J RES-MET RN -C	323A5003J0200	2	
81	R67	RM73B2A390J RES-MET RN -C	323A5003J0390	1	
82	R125	RM73B2A430J RES-MET RN -C	323A5003J0430	1	
83	R5,R6	MSF1/2B2ohmJ RES-MET OX -	324A1001J0209	2	4KH-31051-152
84	R3,R4	MSF1/2B0.51ohmJ RES-MET OX -	324A1001J0518	2	4KH-31051-152
85	R1,R2	RNS1-1ohmJ RES-MET OX -	324A1012J0109	2	4KH-31051-152
86	R27-R29,R66,R70,R76, R78,R90,R91,R201, R219,R220,R228,R231, R240,R242,R244,R508, R540,R556,R560,R561, R567,R630,R637,R907	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	26	

E76 PCB Assy (41794301BT) (5/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
87					
88	RM10,RM11,RM16-RM28	CN1J/EXB/BCN47KohmJ RES-Block -C	3345003J0473	15	
89	RM5-RM9,RM13-RM15, RM29-RM34	CN1J/EXB/BCN68ohmJ RES/Block -C	3345003J0680	14	
90					
91	C568,C569	GRM/UMK/080Ch 50V CAP-Ceramic -C 8pF	3033003C0080	2	
92	C912	GRM/UMK/MCH/100CH CAP-Ceramic -C	3033003C0100	1	
93	C50-C53,C90,C545,C562	GRM/UMK/MCH/101CH CAP/Ceramic -C	3033003C0101	7	
94	C928	GRM/UMK/MCH/120CH CAP-Ceramic -C	3033003C0120	1	
95	C213,C215	GRM/UMK/MCH/180CH CAP-Ceramic -C	3033003C0180	2	
96	C705,C706	GRM/UMK/MCH/220CH CAP-Ceramic -C	3033003C0220	2	
97	C32,C35,C38,C46,C47, C208,C544,C574-C577, C581,C586,C625,C662 , C710,C908,C932	GRM/UMK/MCH/221CH CAP-Ceramic -C	3033003C0221	18	
98	C94	GRM/UMK/MCH/470CH CAP-Ceramic -C	3033003C0470	1	
99	C57,C66,C67,C69-C71, C77,C78,C501,C502, C507,C508,C514,C517, C520,C521,C523,C526, C527,C540,C542,C543, C547,C548,C550,C551, C553,C557-C559,C565, C571,C573,C578,C583, C592,C596,C597,C599, C602-C606,C619,C626-C636,C638,C640,C642, C646,C647,C668,C901-C906,C913-C923,C925, C929,C930	GRM/UMK/MCH/102B 50V GAP-Ceramic -C	3036003K0102	82	
100	C55,C503,C512,C513, C556,C570,C582,C656, C666,C727,C728,C741-C749	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0103	20	
101	C210,C515,C530,C531, C615,C616,C637	GRM/UMK/MCH/222B 50V CAP-Ceramic -C	3036003K0222	7	
102	C712	GRM/TMK/MCH/473B 25V CAP-Ceramic -C	3036003K0473	1	
103	C33,C36	GRM/UMK/MCH/561B 50V CAP-Ceramic -C	3036003K0561	2	

E76 PCB Assy (41794301BT) (6/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
104	C25,C45,C48,C49,C65, C75,C76,C93,C209,C504-C506,C509-C511,C516, C518,C519,C522,C524, C525,C528,C529,C532-C539,C541,C546,C549, C552,C554,C555,C560, C561,C566,C572,C579, C580,C584,C585,C587-C591,C593-C595,C598, C600,C601,C607-C614, C617,C618,C620,C621, C624,C639,C641,C643-C645,C648-C655,C657-C661,C663-C665,C667, C669,C701-C703,C708, C711,C714-C718,C729, C731-C734,C909,C910, C924,C926,C927,C931, C933-C938	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	119	
105	C211,C212,C214	GRM/LMK/MCH/105Z 10V CAP-Ceramic -C	3036003Z0105	3	
106	C56,C62,C622	EMK107F474ZA-T 16V CAP-Ceramic -C	3036005Z0474	3	
107	C16,C17	KME25VB-100-0A 25V CAP-Alum(CE) -	304A1039E1101	2	
108	C204-C206	10MS5-10M 10V CAP-Alum(CE) -10uF	304A1046A1100	3	
109	C201,C202,C207	10MS5-33M 10V CAP-Alum(CE) -33uF	304A1046A1330	3	
110	C19	10MS5-68M 10V CAP-Alum(CE) -68uF	304A1046A1680	1	
111	C3,C5,C7,C12,C18,C39	16MS5-10M 16V CAP-Alum(CE) -10uF	304A1046C1100	6	
112	C2,C4,C6,C8,C20,C28, C43,C60,C61,C92,C203	16MS5-47M 16V CAP-Alum(CE) -47uF	304A1046C1470	11	
113	C1	50MS5-0.68M 50V CAP-Alum(CE) -	304A1046H1688	1	
114	C11	UVS1A332MHA 10V CAPU-Alum(CE) -	304A1137A1332	1	
115	C10,C14	KMG50VB-220M 50V CAP-Alum(CE) -	304A1164H1221	2	
116	C15	KMG63VB-100M 63V CAP-Alum(CE) -	304A1164J1101	1	
117	C13	KMG10VB-470M-FC 10V CAP-Alum(CE) -	304A1180A1471	1	
118	C9,C23	KMG50VB-47M-FC 50V CAP-Alum(CE) -47uF	304A1180H1470	2	
119					
120	IC22	SN74S1053NS Digital IC-BIP-S	7001050N1053	1	

E76 PCB Assy (41794301BT) (7/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
121	IC30	SN74LVC161284DGGR Digital IC-MOS-S	7022350N1284	1	
122	IC7	SN74LV08ANSR Digital IC-MOS-S	7022450N3008	1	
123	IC6,IC33	SN74LV32ANSR Digital IC-MOS-S	7022450N3032	2	
124	IC8	SN74LV126ANSR Digital IC-MOS-S	7022450N3126	1	
125	IC35	SN74LV175ANSR Digital IC-MOS-B	7022450N3175	1	
126	IC2	UPD65946GN-022-LMU Digital IC-MOS-F	7024923N1168	1	
127	IC34	74HC00FP Digital IC-MOS-S	702A1703N0000	1	
128	IC24	74HC08FP Digital IC-MOS-S	702A1703N0008	1	
129	IC13,IC25	74HC14FP Digital IC-MOS-S	702A1703N0014	2	
130	IC5,IC23	74HC126FP Digital IC-MOS-S	702A1703N0126	2	
131	IC36	74HC175FP Digital IC-MOS-S	702A1703N0175	1	
132	IC19	HA178M05/AN78M05F Analog-BIPLIN -	7201003M1005	1	
133	IC4	NR8576AB Analog-BIPLIN -S	7201540N0001	1	
134	IC16	A2918SWH Analog-BIPLIN -	7201826M0001	1	
135	IC27	SMA7029M(LF1055) Analog-BIPLIN -	7201826M0002	1	
136	IC14	NJM318E Analog-BIPLIN -S	720A0028N0113	1	
137	IC20	NJM386M Analog-BIPLIN -S	720A0028N0006	1	
138	IC15,IC208	NJM4558 Analog-BIPLIN -S	720A0028N0039	2	
139	IC18	MTD2005FB Analog-BIPLIN -S	720A1816N0001	1	
140	IC1	M51953AFP Analog-BIPLIN -S	720A4022N0008	1	
141	IC10	RN5RF36BA-TR nalog-MOSLIN -C	7301042N0002	1	
142	IC12	RN5VL40AA-TR Analog-MOSLIN -S	7300042N0001	1	
143	IC11	R1110N361B-TR Analog-MOSLIN -C	7301042N0003	1	
144	IC205	RN5RF33BA-TR Analog-MOSLIN -C	7301042N0004	1	

E76 PCB Assy (41794301BT) (8/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
145	IC21	TC4051BF Analog-MOS SW -S	731A0525N0001	1	
146	IC3	MN86064A-2 CPU-MOS -F	8510332N0001	1	
147	IC26	LC821033 CPU-Interface -F	8550901N0001	1	
148	IC201	MN195006A Analog-MOSdata -F	7320027N0002	1	
149	IC202	STLC7550TQF7 Analog-MOSdata -F	7320068N0001	1	
150	IC91,IC92,IC203,IC204, IC207	74LVC245APW/ Digital IC-MOS -B	7022203N3245	5	
151	FLS1	FLASH MEM.IC	41920801	1	
152	FLS2	FLASH MEM.IC	41920901	1	
153	RAM1	OR-Memory-MOSDRAM-S	41593201	1	
154	CPU	HD6437034AE54F CPU-MOS (ROM)-F	8530432N0009	1	
155					
156	LC7	ZJSC-R10-470-TA COMP PAR-LC -P	3421000P0470	1	
157	LC2	NFV610-655T2A506 COMP PAR-LC -	342A1008P2506	1	
158	LC3-LC6	ZJSR5101-221 COMP PAR-LC -	342A1011P1221	4	
159	L1	LHL08TB-103J Coil-HF -P	3531001J0103	1	
160	L2	LHL08TB-181K Coil-HF -P	3531001K0181	1	
161	BF1	SA-8506185/ZBF253 Filter-PW line -N	3771003P0001	1	
162	LC1,LC10,LC11,LC13- LC15,LC510,LC511, LC518-LC528	BLM11A601SPT Core- -C	1055002C0001	19	
163	LC501,LC502	ACB1608M-300-T Filter-PW line -C	3775001P0001	2	
164					
165	TR7-TR10,TR507	A1344/UN2111/DTA114K TR-PNP/H FREQ -C	600A1003N0003	5	
166	TR504	2SA1162-Y TR-PNP/H FREQ -C	600A1025M0017Y	1	
167	TR1,TR2	2SA950-Y TR-PNP/H FREQ -	600A1125M0011Y	2	4LH-31420
168	TR3,TR4	2SB1123 TR-PNP/L-FREQ -C	601A1032N0002	2	
169	TR201	2SB766A-Q/R TR-PNP/L-FREQ -C	601A1130M0001	1	

E76 PCB Assy (41794301BT) (9/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
170	TR5,TR6,TR11,TR14, TR15	2SC2712-Y/G TR-NPN/H-FREQ-C	602A1025M0033	5	
171	TR505,TR506	DTC124EK TR-NPN/H-FREQ-C	602A1035N0004	2	
172	TR501-TR503,TR508, TR509	DTC123YK TR-NPN/H-FREQ-C	602A1035N0019	5	
173	TR12,TR13	2SK1062 TR-N/FET -C	605A1025N0006	2	
174					
175	CN17	57RE-40360-830B-D29 Connector-SQR -	2201001P0360	1	
176	CN5	SLD12S-2 Connector-PCB -	2243001P0120	1	
177	CN4	SLD14S-2 Connector-PCB -	2243001P0140	1	
178	CN6	B10B-EH Connector-PCB -	2243022P0100	1	
179	CN7	07FE-BT-VK-N Connector-PCB -	2244102P0070	1	
180	CN16	TX25-80P-12ST-H1 Connector-PCB -	2244121P0800	1	
181	CN9	IL-S-8P-S2T2-EF Connector-PCB -	224A3052P0080	1	
182	CN3	00-8263-0412-00-000 Connector-PCB -	224A3357P0040	1	
183	CN2	00-8263-0412-00-003 Connector-PCB -	224A3357P0041	1	
184	CN1	00-8272-232-001-112 Connector-PCB -	224A3368P0320	1	
185	CN18	B2B-PH-K-S Connector-PCB -	224A3529P0020	1	
186	CN14	B6B-PH-K-S Connector-PCB -	224A3529P0060	1	
187	CN13	B10B-PH-K-S Connector-PCB -	224A3529P0100	1	
188	CN15	B16B-PH-K-S Connector-PCB -	224A3529P0160	1	
189	CN20	S3B-PH-K-S Connector-PCB -	224A3531P0030	1	
190	CN10	B2B-EH Connector-PCB -	224A3535P0020	1	
191	CN8	B6B-EH Connector-PCB -	224A3535P0060	1	
192	CN12	5-176135-4 Connector-PCB -	224A4325P0300	1	
193	CN201	A3-50DA/IMSA-9259S Connector-PCB -	2241003P0500	1	

E76 PCB Assy (41794301BT) (10/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
194	CN11	A3B-50PA/IMSA-9210B Connector-PCB -	2241003P0501	1	
195	CN19	179759-1 Socket-SEMICON -	2451004P0720	1	
196					
197	BAT1	CR2430-FT6 BATT-Primary -	455A3027P0001	1	
198					
199	F3	431001 FUSE -C	5402200S0102	1	
200	F1,F2	251-002 FUSE -	540A2208S1202	2	
201					
202	EB2	POWER BAR	LH-31313-86	1	
203	EB1		LH-31313-124	1	
204					
205	X1	HC-49/U03C-20.00MHz OSC-Crystal -C	3801001B0003	1	
206	X201	HC-49/U03C-24.576MHz OSC-Crystal -C	3801001B0007	1	
207					
208			LP-7134	1	L=20mm
209		Screw	PSW2W3-8C	2	
210		Nut	3N3-HH	2	

E76-2 PCB Assy (41794302BT) (1/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D12,D501	ISS392(TE85R) D-Signal -C	6110225N0001	2	
2	D5-D7,D201	SS100MA80VKCP D-Signal -C	611A0000N0002	4	
3	D502,D504,D505,D730	SS100MA80VSCP D-Signal -C	611A0000L0003	4	
4	D13	1S953/1S2075K/1S2473 D-Signal -	611A0003L0001	1	4KH-31051-102
5	D2-D4,D9,D11	1SS349 D-Signal -C	611A0225N0004	5	
6	D503,D506-D508,D721-D729	SB007T03C D-Signal -C	611A0232N0002	13	
7	D8,D10	RD4.7M-B2 D-Zenor -C	613A0233M0102B	2	
8	D1	RD6.2E-B3 D-Zener -	613A1231L0132C	1	4KH-31051-102
9					
10	R7	RD1/2Y180ohmJ RES-Carbon flm -	321A1431J0181	1	4KH-31051-102
11	R617,R729	CR/RK73H/ERJ/MCRF102 RES-MET RN -C	3235003F0102	2	
12	R642	CR/RK73H/ERJ/MCRF103 RES-MET RN -C	3235003F0103	1	
13	R133,R915	CR/RK73H/EJR/MCRF104 RES-MET RN -C	3235003F0104	2	
14	R538	CR/RK73H/ERJ/MCRF121 RES-MET RN -C	3235003F0121	1	
15	R222	CR/RK73H/ERJ/MCRF122 RES-MET RN -C	3235003F0122	1	
16	R245	CR/RK73H/ERJ/MCRF123 RES-MET RN -C	3235003F0123	1	
17	R224,R226,R629	CR/RK73H/ERJ/MCRF133 RES-MET RN -C	3235003F0133	3	
18	R666,R704	CR/RK73H/ERJ/MCRF153 RES-MET RN -C	3235003F0153	2	
19	R703	CR/RK73H/ERJ/MCRF164 RES-MET RN -C	3235003F0164	1	
20	R132	CR/RK73H/ERJ/MCRF202 RES-MET RN -C	3235003F0202	1	
21	R127	CR/RK73H/ERJ/MCRF204 RES-MET RN -C	3235003F0204	1	
22	R119	CR/RK73H/ERJ/MCRF222 RES-MET RN -C	3235003F0222	1	
23	R594	CR/RK73H/ERJ/MCRF241 RES-MET RN -C	3235003F0241	1	
24	R504	CR/RK73H/ERJ/MCRF243 RES-MET RN -C	3235003F0243	1	

E76-2 PCB Assy (41794302BT) (2/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
25	R615,R616	CR/RK73H/ERJ/MCRF270 RES-MET RN -C	3235003F0270	2	
26	R529	CR/RK73H/ERJ/MCRF271 RES-MET RN -C	3235003F0271	1	
27	R537	CR/RK73H/ERJ/MCRF272 RES-MET RN -C	3235003F0272	1	
28	R593	CR/RK73H/ERJ/MCRF301 RES-MET RN -C	3235003F0301	1	
29	R618	CR/RK73H/ERJ/MCRF302 RES-MET RN -C	3235003F0302	1	
30	R223	CR/RK73H/ERJ/MCRF232 RES-MET RN -C	3235003F0332	1	
31	R613,R614	CR/RK73H/ERJ/MCRF390 RES-MET RN -C	3235003F0390	2	
32	R665	CR/RK73H/ERJ/MCRF391 RES-MET RN -C	3235003F0391	1	
33	R672	CR/RK73H/ERJ/MCRF392 RES-MET RN -C	3235003F0392	1	
34	R506	CR/RK73H/ERJ/MCRF432 RES-NET RN -C	3235003F0432	1	
35	R131	CR/RK73H/ERJ/MCRF563 RES-MET RN -C	3235003F0563	1	
36	R708	CR/RK73H/ERJ/MCRF681 RES-MET RN -C	3235003F0681	1	
37	R126	CR/RK73H/ERJ/MCRF821 RES-MET RN -C	3235003F0821	1	
38	R588	CR/RK73H/ERJ/MCRF912 RES-MET RN -C	3235003F0912	1	
39	R225,R227,R246,R910	CR/RK73H/ERJ/MCRF913 RES-MET RN -C	3235003F0913	4	
40	R114-R118,R582-R585, R648,R649,R710,R908, R909	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	14	
41	R85,R135-R144,R146, R149,R150,R551,R555, R599,R609	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	18	
42	R106-R109,R180,R507, R515,R519,R553,R564, R651,R653,R727	CR/RK73K/ERJ/MCRJ102 RES-NET RN -C	3235003J0102	13	
43	R8,R15,R94,R95,R102, R103,R238,R241,R505, R597,R598,R603-R605, R607,R638-R641,R918	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	20	
44	R205,R209,R230,R525, R543,R600,R601,R608, R700,R701	CR/RK73K/ERJ/MCRJ104 RES-MET RN -C	3235003J0104	10	
45	R501	CR/RK73K/ERJ/MCRJ105 RES-MET RN -C	3235003J0105	1	

E76-2 PCB Assy (41794302BT) (3/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
46	R571,R576	CR/RK73K/ERJ/MCRJ132 RES-MET RN -C	3235003J0132	2	
47	R21,R33	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	2	
48	R652	CR/RK73K/ERJ/MCRJ153 RES-MET RN -C	3235003J0153	1	
49	R620,R622	CR/RK73K/ERJ/MCRJ202 RES-MET RN -C	3235003J0202	2	
50	R25,R26	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	2	
51	R134	CR/RK73K/ERJ/MCRJ204 RES-MET RN -C	3235003J0204	1	
52	R72-R74,R509-R514, R557	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	10	
53	R632	CR/RK73K/ERJ/MCRJ222 RES-MET RN -C	3235003J0222	1	
54	R30	CR/R73K/ERJ/MCRJ223 RES-MET RN -C	3235003J0223	1	
55	R520	CR/RK73K/ERJ/MCRJ224 RES-MET RN -C	3235003J0224	1	
56	R148	CR/RK73K/ERJ/MCRJ241 RES-MET RN -C	3235003J0241	1	
57	R536,R549	CR/RK73K/ERJ/MCRJ242 RES-MET RN -C	3235003J0242	2	
58	R93	CR/RK73K/ERJ/MCRJ332 RES-MET RN -C	3235003J0332	1	
59	R539,R541	CR/RK73K/ERJ/MCRJ333 RES-MET RN -C	3235003J0333	2	
60	R623	CR/RK73K/ERJ/MCRJ392 RES-MET RN -C	3235003J0392	1	
61	R83,R87,R202-R204, R210,R211	CR/RK73K/ERJ/MCRJ470 RES-MET RN -C	3235003J0470	7	
62	R9-R11,R61,R63,R82,R84, R86,R521,R534,R558, R574,R645,R654,R655, R657-R659 ,R724,R920	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	20	
63	R34-R36,R38,R39,R62,R64, R68,R80,R81,R88,R92, R96-R101,R104,R105, R110-R113,R155,R214, R215,R518,R550,R562, R563,R573,R577,R596, R602,R610,R631,R633- R635,R650,R660,R662- R664,R706,R720-R723, R901,R903,R905,R921	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	54	
64	R45-R60,R232-R234, R522-R524,R526-R528, R530-R532,R575,R581, R595,R606,R705,R709	CR/RK73K/ERJ/MCRJ474 RES-MET RN -C	3235003J0474	34	

E76-2 PCB Assy (41794302BT) (4/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
65	R221,R552,R667	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	3	
66	R20,R23,R24,R619	CR/RK73K/ERJ/MCRJ621 RES-MET RN -C	3235003J0621	4	
67	R71,R79,R154	CR/RK73K/ERJ/MCRJ680 RES-MET RN -C	3235003J0680	3	
68	R636	CR/RK73K/ERJ/MCRJ683 RES-MET RN -C	3235003J0683	1	
69	R502,R503	CR/RK73K/ERJ/MCRJ752 RES-MET RN -C	3235003J0752	2	
70	R128,R129	RM73B2A121F RES-MET RN -C	323A5003F0121	2	
71	R123	RM73B2A131F RES-MET RN -C	323A5003F0131	1	
72	R122	RM73B2A151F RES-MET RN -C	323A5003F0151	1	
73	R535	RM73B2A202F RES-MET RN -C	323A5003F0202	1	
74	R120,R121	RM73B2A241F RES-MET RN -C	323A5003F0241	2	
75	R69	RM73B2A331F RES-MET RN -C	323A5003F0331	1	
76	R545	RM73B2A432F RES-MET RN -C	323A5003F0432	1	
77	R124	RM73B2A470F RES-MET RN -C	323A5003F0470	1	
78	R546	RM73B2A822F RES-MET RN -C	323A5003F0822	1	
79	R591,R592	RM73B2A121J RES-MET RN -C	323A5003J0121	2	
80	R625,R627	RM73B2A200J RES-MET RN -C	323A5003J0200	2	
81	R67	RM73B2A390J RES-MET RN -C	323A5003J0390	1	
82	R125	RM73B2A430J RES-MET RN -C	323A5003J0430	1	
83	R5,R6	MSF1/2B2ohmJ RES-MET OX -	324A1001J0209	2	4KH-31051-152
84	R3,R4	MSF1/2B0.51ohmJ RES-MET OX -	324A1001J0518	2	4KH-31051-152
85	R1,R2	RNS1-1ohmJ RES-MET OX -	324A1012J0109	2	4KH-31050-152
86	R27-R29,R66,R70,R76, R78,R90,R91,R156,R201, R219,R220,R228,R231, R240,R242,R244,R508, R540,R556,R560,R561, R567,R630,R637,R907	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	27	

E76-2 PCB Assy (41794302BT) (5/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
87					
88	RM10,RM11,RM20-RM28	CN1J/EXB/BCN47KohmJ RES-Block -C	3345003J0473	11	
89	RM5-RM9,RM13-RM15, RM29-RM34	CN1J/EXB/BCN68ohmJ RES/Block -C	3345003J0680	14	
90					
91	C568,C569	GRM/UMK/080Ch 50V CAP-Ceramic -C 8pF	3033003C0080	2	
92	C912	GRM/UMK/MCH/100CH CAP-Ceramic -C	3033003C0100	1	
93	C50-C53,C545,C562	GRM/UMK/MCH/101CH CAP/Ceramic -C	3033003C0101	6	
94	C928	GRM/UMK/MCH/120CH CAP-Ceramic -C	3033003C0120	1	
95	C213,C215	GRM/UMK/MCH/180CH CAP-Ceramic -C	3033003C0180	2	
96					
97	C35,C38,C46,C47,C208, C544,C574-C577,C581, C586,C625,C662,C710, C908,C932	GRM/UMK/MCH/221CH CAP-Ceramic -C	3033003C0221	17	
98	C94	GRM/UMK/MCH/470CH CAP-Ceramic -C	3033003C0470	1	
99	C57,C66,C67,C69-C71, C77,C78,C501,C502, C507,C508,C514,C517, C520,C521,C523,C526, C527,C540,C542,C543, C547,C548,C550,C551, C553,C557-C559,C565, C571,C573,C578,C583, C592,C596,C597,C599, C602-C606,C619,C626-C636,C638,C640,C642, C646,C647,C668,C901-C906,C913-C923,C925, C929,C930	GRM/UMK/MCH/102B 50V GAP-Ceramic -C	3036003K0102	82	
100	C55,C503,C512,C513, C556,C570,C582,C656, C666,C727,C728,C741-C749	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0103	20	
101	C210,C515,C530,C531, C615,C616,C637	GRM/UMK/MCH/222B 50V CAP-Ceramic -C	3036003K0222	7	
102	C712	GRM/TMK/MCH/473B 25V CAP-Ceramic -C	3036003K0473	1	
103	C33,C36	GRM/UMK/MCH/561B 50V CAP-Ceramic -C	3036003K0561	2	

E76-2 PCB Assy (41794302BT) (6/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
104	C25,C45,C48,C49,C65, C75,C76,C93,C209,C504-C506,C509-C511,C516, C518,C519,C522,C524, C525,C528,C529,C532-C539,C541,C546,C549, C552,C554,C555,C560, C561,C566,C572,C579, C580,C584,C585,C587-C591,C593-C595,C598, C600,C601,C607-C614, C617,C618,C620,C621, C624,C639,C641,C643-C645,C648-C655,C657-C661,C663-C665,C667, C669,C701-C703,C708, C711,C714-C718,C729, C731-C734,C909,C910, C924,C926,C927,C931, C933-C938	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	119	
105	C211,C212,C214	GRM/LMK/MCH/105Z 10V CAP-Ceramic -C	3036003Z0105	3	
106	C56,C62,C622	EMK107F474ZA-T 16V CAP-Ceramic -C	3036005Z0474	3	
107	C16,C17	KME25VB-100-0A 25V CAP-Alum(CE) -	304A1039E1101	2	
108	C204-C206	10MS5-10M 10V CAP-Alum(CE) -10uF	304A1046A1100	3	
109	C201,C202,C207	10MS5-33M 10V CAP-Alum(CE) -33uF	304A1046A1330	3	
110	C19	10MS5-68M 10V CAP-Alum(CE) -68uF	304A1046A1680	1	
111	C3,C5,C7,C12,C18,C39	16MS5-10M 16V CAP-Alum(CE) -10uF	304A1046C1100	6	
112	C2,C4,C6,C8,C20,C28, C43,C60,C61,C92,C203	16MS5-47M 16V CAP-Alum(CE) -47uF	304A1046C1470	11	
113	C1	50MS5-0.68M 50V CAP-Alum(CE) -	304A1046H1688	1	
114	C11	UVS1A332MHA 10V CAPU-Alum(CE) -	304A1137A1332	1	
115	C10,C14	KMG50VB-220M 50V CAP-Alum(CE) -	304A1164H1221	2	
116	C15	KMG63VB-100M 63V CAP-Alum(CE) -	304A1164J1101	1	
117	C13	KMG10VB-470M-FC 10V CAP-Alum(CE) -	304A1180A1471	1	
118	C9,C23	KMG50VB-47M-FC 50V CAP-Alum(CE) -47uF	304A1180H1470	2	
119					
120	IC22	SN74S1053NS Digital IC-BIP-S	7001050N1053	1	

E76-2 PCB Assy (41794302BT) (7/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
121	IC30	SN74LVC161284DGGR Digital IC-MOS-S	7022350N1284	1	
122	IC7	SN74LV08ANSR Digital IC-MOS-S	7022450N3008	1	
123	IC6,IC33	SN74LV32ANSR Digital IC-MOS-S	7022450N3032	2	
124	IC8	SN74LV126ANSR Digital IC-MOS-S	7022450N3126	1	
125	IC35	SN74LV175ANSR Digital IC-MOS-B	7022450N3175	1	
126	IC2	UPD65946GN-022-LMU Digital IC-MOS-F	7024923N1168	1	
127	IC34	74HC00FP Digital IC-MOS-S	702A1703N0000	1	
128	IC24	74HC08FP Digital IC-MOS-S	702A1703N0008	1	
129	IC13,IC25	74HC14FP Digital IC-MOS-S	702A1703N0014	2	
130	IC5,IC23	74HC126FP Digital IC-MOS-S	702A1703N0126	2	
131	IC36	74HC175FP Digital IC-MOS-S	702A1703N0175	1	
132	IC19	HA178M05/AN78M05F Analog-BIPLIN -	7201003M1005	1	
133	IC4	NR8576AB Analog-BIPLIN -S	7201540N0001	1	
134	IC16	A2918SWH Analog-BIPLIN -	7201826M0001	1	
135	IC27	SMA7029M(LF1055) Analog-BIPLIN -	7201826M0002	1	
136	IC14	NJM318E Analog-BIPLIN -S	720A0028N0113	1	
137	IC20	NJM386M Analog-BIPLIN -S	720A0028N0006	1	
138	IC15,IC208	NJM4558 Analog-BIPLIN -S	720A0028N0039	2	
139	IC18	MTD2005FB Analog-BIPLIN -S	720A1816N0001	1	
140	IC1	M51953AFP Analog-BIPLIN -S	720A4022N0008	1	
141	IC10	RN5RF36BA-TR nalog-MOSLIN -C	7301042N0002	1	
142	IC12	RN5VL40AA-TR Analog-MOSLIN -S	7300042N0001	1	
143	IC11	R1110N361B-TR Analog-MOSLIN -C	7301042N0003	1	
144	IC205	RN5RF33BA-TR Analog-MOSLIN -C	7301042N0004	1	

E76-2 PCB Assy (41794302BT) (8/10)

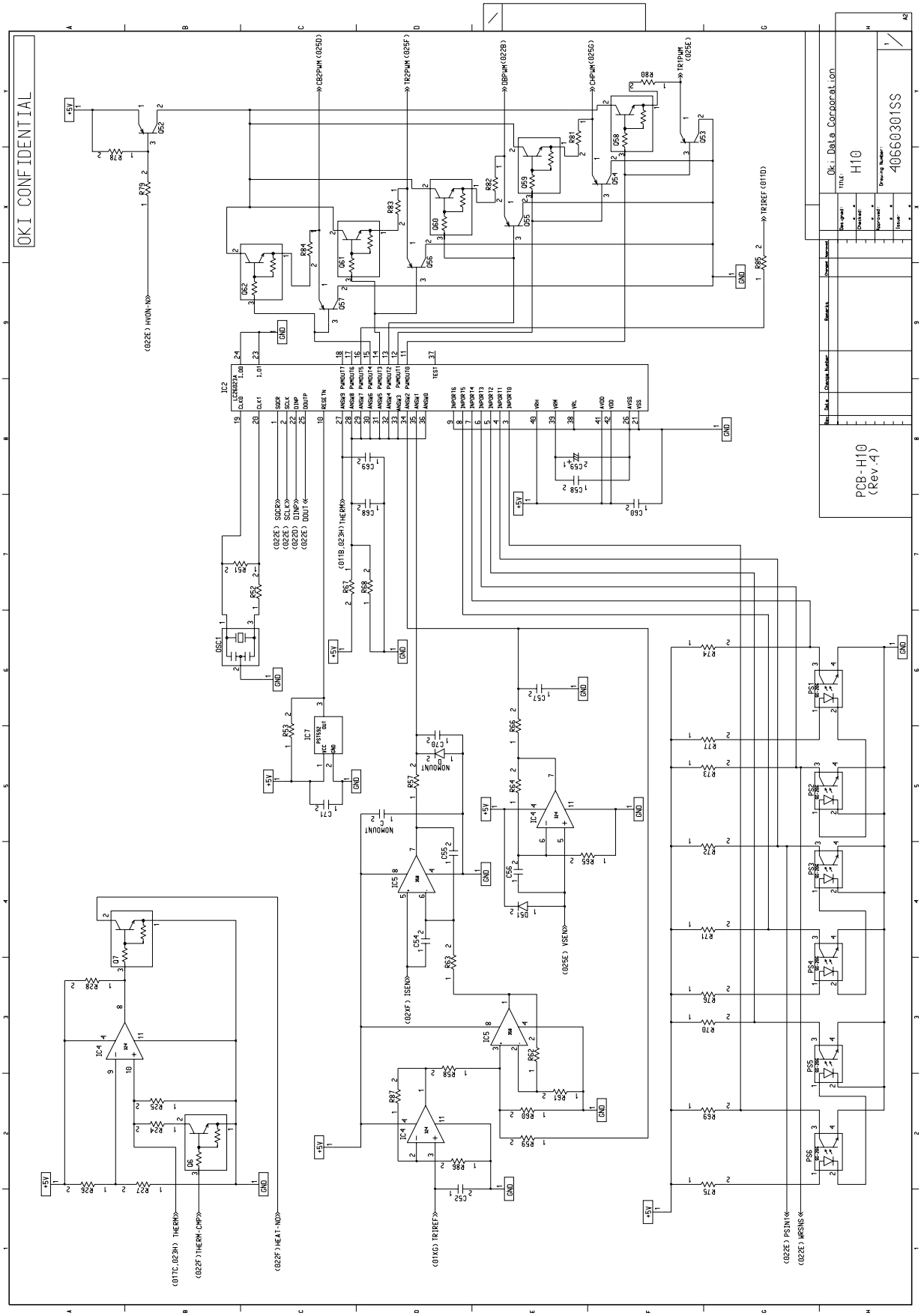
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
145	IC21	TC4051BF Analog-MOS SW -S	731A0525N0001	1	
146					
147	IC26	LC821033 CPU-Interface -F	8550901N0001	1	
148	IC201	MN195006A Analog-MOSdata -F	7320027N0002	1	
149	IC202	STLC7550TQF7 Analog-MOSdata -F	7320068N0001	1	
150	IC91,IC92,IC203,IC204, IC207	74LVC245APW/ Digital IC-MOS -B	7022203N3245	5	
151	FLS1	FLASH MEM.IC	41920801	1	
152	FLS2	FLASH MEM.IC	41920901	1	
153	RAM1	OR-Memory-MOSDRAM-S	41593201	1	
154	CPU	HD6437034AE54F CPU-MOS (ROM)-F	8530432N0009	1	
155					
156	LC7	ZJSC-R10-470-TA COMP PAR-LC -P	3421000P0470	1	
157	LC2	NFV610-655T2A506 COMP PAR-LC -	342A1008P2506	1	
158	LC3-LC6	ZJSR5101-221 COMP PAR-LC -	342A1011P1221	4	
159	L1	LHL08TB-103J Coil-HF -P	3531001J0103	1	
160	L2	LHL08TB-181K Coil-HF -P	3531001K0181	1	
161	BF1	SA-8506185/ZBF253 Filter-PW line -N	3771003P0001	1	
162	LC1,LC10,LC11,LC13- LC15,LC510,LC511, LC518-LC528	BLM11A601SPT Core- -C	1055002C0001	19	
163	LC501,LC502	ACB1608M-300-T Filter-PW line -C	3775001P0001	2	
164					
165	TR7-TR10,TR507	A1344/UN2111/DTA114K TR-PNP/H FREQ -C	600A1003N0003	5	
166	TR504	2SA1162-Y TR-PNP/H FREQ -C	600A1025M0017Y	1	
167	TR1,TR2	2SA950-Y TR-PNP/H FREQ -	600A1125M0011Y	2	4LH-31420
168	TR3,TR4	2SB1123 TR-PNP/L-FREQ -C	601A1032N0002	2	
169	TR201	2SB766A-Q/R TR-PNP/L-FREQ -C	601A1130M0001	1	

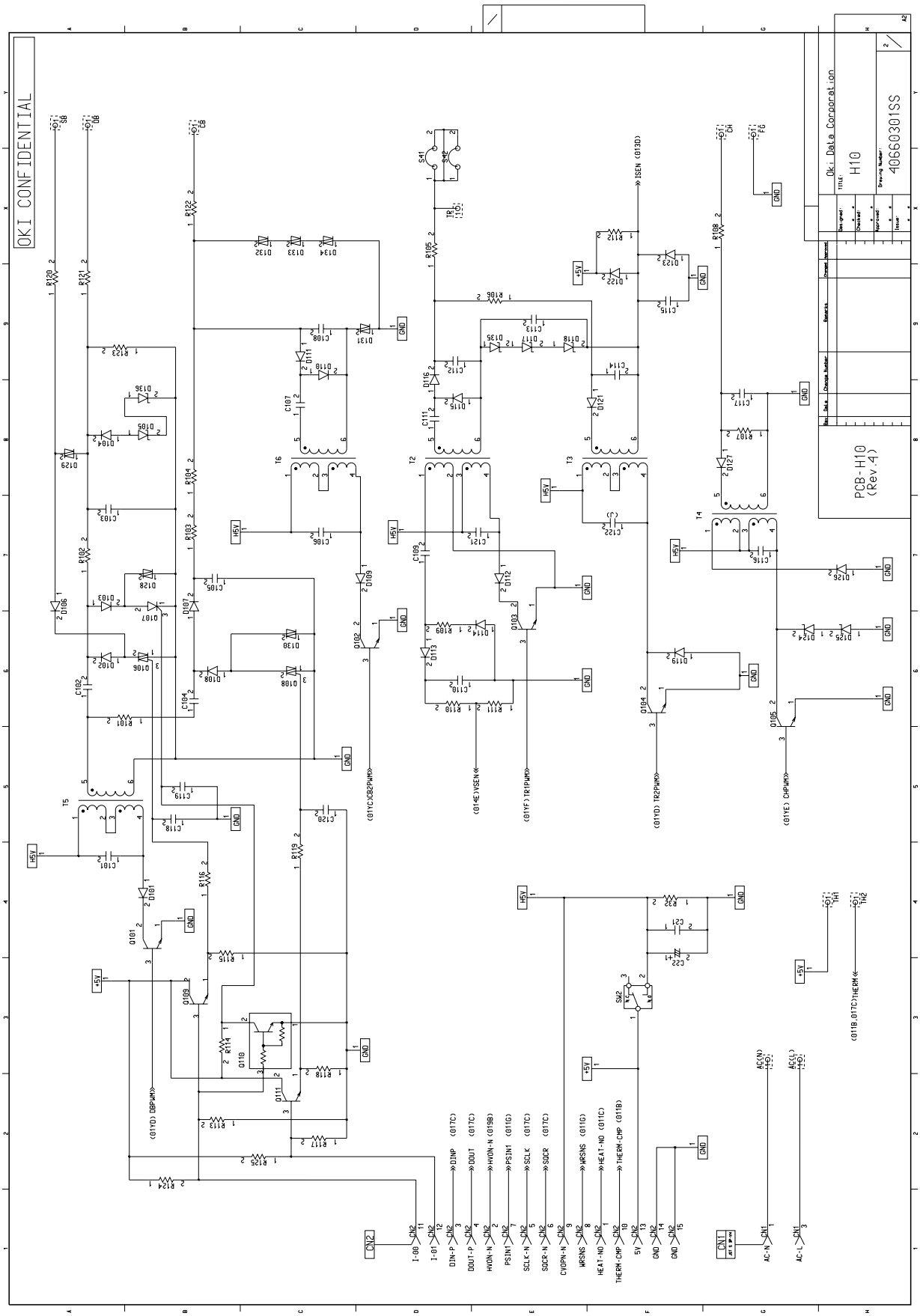
E76-2 PCB Assy (41794302BT) (9/10)

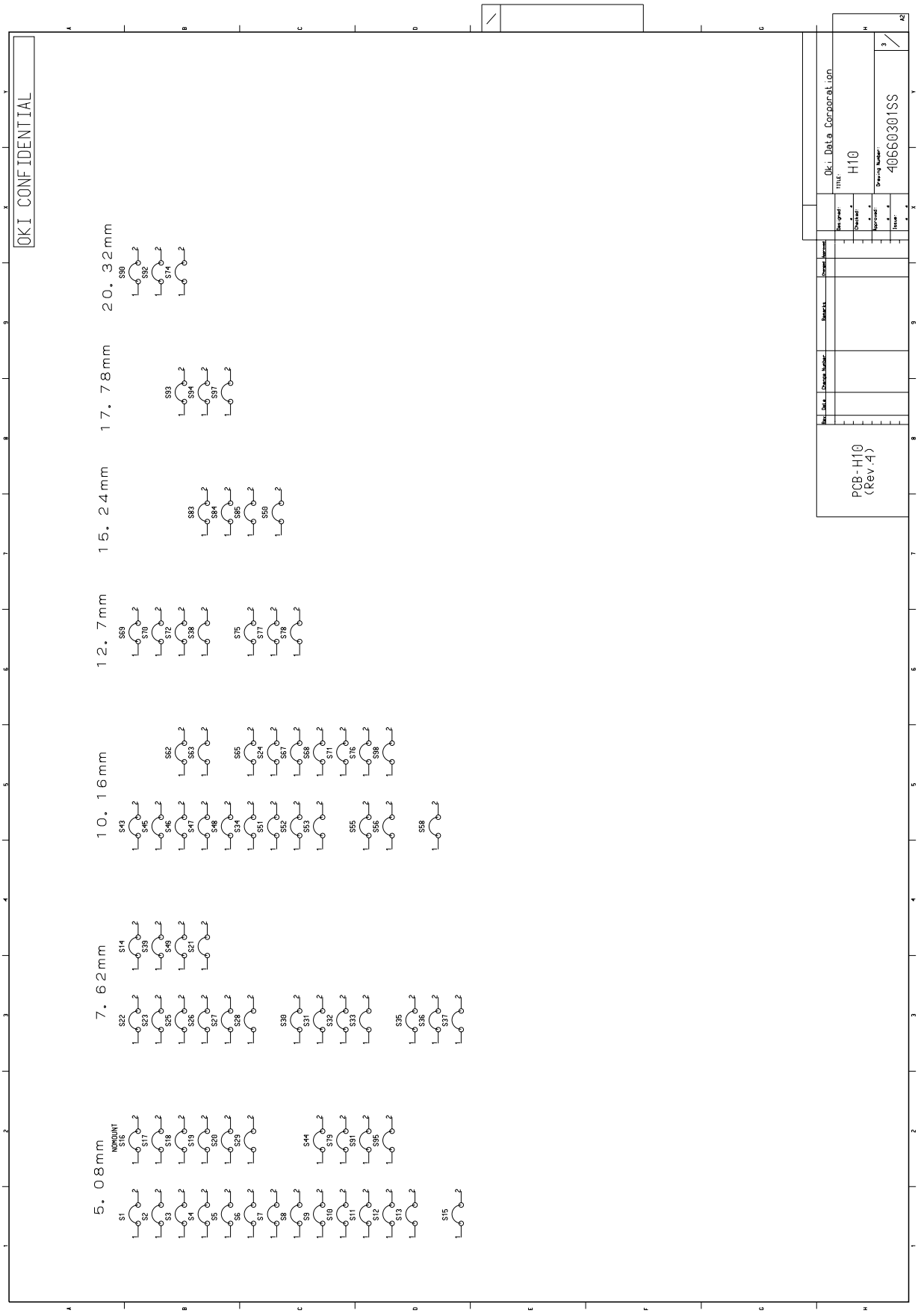
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
170	TR5,TR6,TR11,TR14, TR15	2SC2712-Y/G TR-NPN/H-FREQ-C	602A1025M0033	5	
171	TR505,TR506	DTC124EK TR-NPN/H-FREQ-C	602A1035N0004	2	
172	TR501-TR503,TR508, TR509	DTC123YK TR-NPN/H-FREQ-C	602A1035N0019	5	
173	TR12,TR13	2SK1062 TR-N/FET -C	605A1025N0006	2	
174					
175	CN17	57RE-40360-830B-D29 Connector-SQR -	2201001P0360	1	
176	CN5	SLD12S-2 Connector-PCB -	2243001P0120	1	
177	CN4	SLD14S-2 Connector-PCB -	2243001P0140	1	
178	CN6	B10B-EH Connector-PCB -	2243022P0100	1	
179	CN7	07FE-BT-VK-N Connector-PCB -	2244102P0070	1	
180	CN16	TX25-80P-12ST-H1 Connector-PCB -	2244121P0800	1	
181	CN9	IL-S-8P-S2T2-EF Connector-PCB -	224A3052P0080	1	
182	CN3	00-8263-0412-00-000 Connector-PCB -	224A3357P0040	1	
183	CN2	00-8263-0412-00-003 Connector-PCB -	224A3357P0041	1	
184	CN1	00-8272-232-001-112 Connector-PCB -	224A3368P0320	1	
185	CN18	B2B-PH-K-S Connector-PCB -	224A3529P0020	1	
186	CN14	B6B-PH-K-S Connector-PCB -	224A3529P0060	1	
187	CN13	B10B-PH-K-S Connector-PCB -	224A3529P0100	1	
188	CN15	B16B-PH-K-S Connector-PCB -	224A3529P0160	1	
189	CN20	S3B-PH-K-S Connector-PCB -	224A3531P0030	1	
190	CN10	B2B-EH Connector-PCB -	224A3535P0020	1	
191	CN8	B6B-EH Connector-PCB -	224A3535P0060	1	
192	CN12	5-176135-4 Connector-PCB -	224A4325P0300	1	
193	CN201	A3-50DA/IMSA-9259S Connector-PCB -	2241003P0500	1	

E76-2 PCB Assy (41794302BT) (10/10)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
194	CN11	A3B-50PA/IMSA-9210B Connector-PCB -	2241003P0501	1	
195	CN19	179759-1 Socket-SEMICON -	2451004P0720	1	
196					
197	BAT1	CR2430-FT6 BATT-Primary -	455A3027P0001	1	
198					
199	F3	431001 FUSE -C	5402200S0102	1	
200	F1,F2	251-002 FUSE -	540A2208S1202	2	
201					
202	EB2	POWER BAR	LH-31313-86	1	
203	EB1		LH-31313-124	1	
204					
205	X1	HC-49/U03C-20.00MHz OSC-Crystal -C	3801001B0003	1	
206	X201	HC-49/U03C-24.576MHz OSC-Crystal -C	3801001B0007	1	
207					
208			LP-7134	1	L=20mm
209		Screw	PSW2W3-8C	2	
210		Nut	3N3-HH	2	


OKI CONFIDENTIAL
Oki Data Corporation
H10
4066301SS
PCB-H10
(Rev.4)


OKI CONFIDENTIAL
Oki Data Corporation
TITLE: H10
Drawing Number: 40660301SS
PCB-H10 (Rev.4)
CN2
CN1
I-00
I-01
DIN-P
DOUT-P
HVON-N
PSIN1
SCLK-N
SOCR-N
CVOPH-N
WRSNS
HEAT-NO
THERM-CMP
5V
GND
AC-N
AC-L
+5V
H5V
GND


OKI CONFIDENTIAL
5.08mm
7.62mm
10.16mm
12.7mm
15.24mm
17.78mm
20.32mm
NOMOUNT
PCB-H10
(Rev.4)
Oki Data Corporation
H10
40660301SS

H10 PCB Assy (40660301BT) (1/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D101-D104,D106-D109, D112,D113,D119,D126	EU02A/RL105F-F D-Rectifying -Q	6100003M0001	12	4KH-31051-127
2	D110,D111,D115,D116, D121,D127	OR-DHM/ESJA/SHV-06	40681301	6	4KH-31051-127
3	D51,D114,D122,D123	1S953/1S2075K/1S2473 D-Signal -	611A0003L0001	4	4KH-31051-102
4	D105	1ZB270-Y/Z(TPA2) D-Zener -Q	6132003M0001	1	4KH-31051-152 U
5	D136	RD12E-B2 D-Zener -	613A1231L0202B	1	4KH-31051-102
6	D124,D125	RD22E-B2 D-Zener -	613A1231L0262B	2	4KH-31051-102
7	D117,D118,D135	1ZB390 D-Zener -	613A2258M0350	3	4KH-31051-152
8	R26,R28,R63,R64,R66	RD16UJ1kohm RES-Carbon flm -	3213420J0102	5	
9	R124,R125	RD16UJ1.5Kohm RES-Carbon flm -	3213420J0152	2	
10	R27	RD16UJ1.8Korm RES-Carbon flm-N	3213420J0182	1	
11	R53,R57,R114	RD1/4Y1KohmJ RES-Carbon flm -	321A1421J0102	3	4KH-31051-
12	R69-R71,R74,R113,R117	RD1/4Y10KohmJ RES-Carbon flm -	321A1421J0103	6	4KH-31051-
13	R25	RD1/4Y100KohmJ RES-Carbon flm -	321A1421J0104	1	4KH-31051-
14	R51,R102,R108,R120-R122	RD1/4Y1MohmJ RES-Carbon flm -	321A1421J0105	6	4KH-31051-
15	R75-R77	RD1/4Y130ohmJ RES-Carbon flm -	321A1421J0131	3	4KH-31051-
16	R52	RD1/4Y150ohmJ RES-Carbon flm -	321A1421J0151	1	4KH-31051-
17	R24,R78,R79	RD1/4Y1.5KohmJ RES-Carbon flm -	321A1421J0152	3	4KH-31051-
18	R72,R73	RD1/4Y20KohmJ RES-Carbon flm -	321A1421J0203	2	4KH-31051-
19	R111	RNL1/4C3F10Kohm RES-MET RN -	323A1222F0103	1	4KH-31051-
20	R65	RD1/4Y300KohmJ RES-Carbon flm -	321A1421J0304	1	4KH-31051-
21	R109	RD1/4Y33ohmJ RES-Carbon flm -	321A1421J0330	1	4KH-31051-
22	R116,R119	RD1/4Y330ohmJ RES-Carbon flm -	321A1421J0331	2	4KH-31051-
23	R80-R84	RD1/4Y510ohmJ RES-Carbon flm -	321A1421J0511	5	4KH-31051-
24	R32,R67,R68,R115,R118	RD1/4Y5.1KohmJ RES-Carbon flm -	321A1421J0512	5	4KH-31051-

H10 PCB Assy (40660301BT) (2/4)

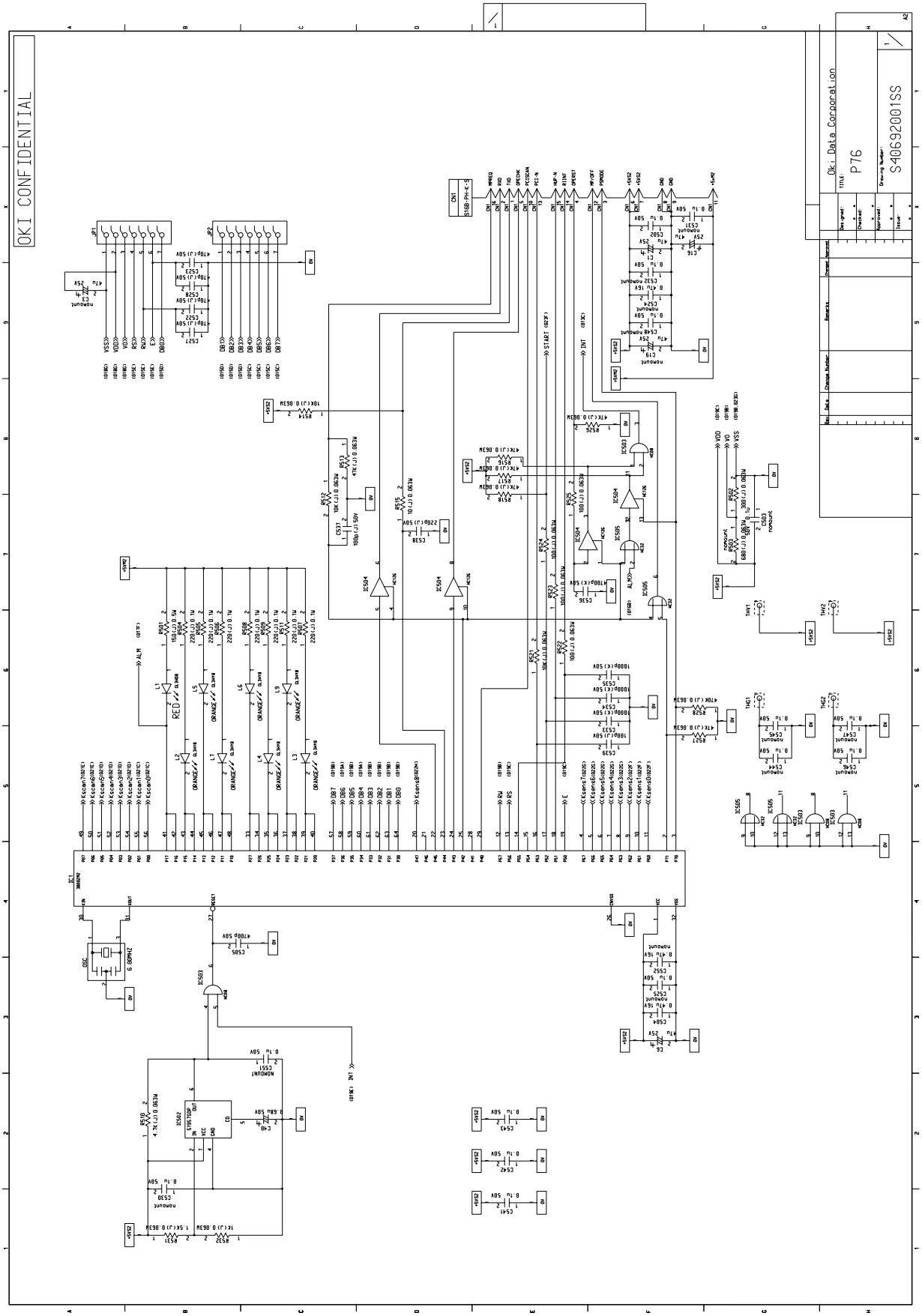
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
25	R101	RD1/4Y51KohmJ RES-Carbon flm -	321A1421J0513	1	4KH-31051-
26	R110	1/4W 75KohmF(AXIAL) RES-MET RN -Q	3231203F0753	1	
27	R60	SN15K2CU 180KohmF RES-MET RN -	3233020F0184	1	
28	R58	SN15K2CU 30KohmF RES-MET RN -	3233020F0303	1	
29	R61,R62	SN15K2CU 33KohmF RES-MET RN -	3233020F0333	2	
30	R59	SN15K2CU 43KohmF RES-MET RN -	3233020F0433	1	
31	R112	RNF1/4W/RN26K2E360KF RES-MET RN -P	3234003F0364	1	
32	R103	HMP1/4-106J RES-MET RN -	323A1029J0106	1	4KH-31051- 178 W
33	R104	RK14B2ET52 20MohmJ RES-MET solid -Q	3261110J0206	1	4KH-31051- 152 U
34	R85-R87	RNL1/4C3F47Kohm RES-MET RN -	323A1222F0473	3	4KH-31051-
35	R105,R123	MRH30MK/HV-22-30MK RES-MET solid -	3263103K0306	2	
36	R106	MRH200MK/HV-38-200MK RES-MET solid -	3263103K0207	1	
37	R107	MRH100MK/HV-38-100MK RES-MET solid -	3263103K0107	1	
38	C113	HNY5P/DE07-1KV-471K CAP-Ceramic -P	3024003K7471	1	
39	C54,C55	HLY5P/DD05-500V-331K CAP-Ceramic -P	3024003K6331	2	
40	C102,C103	HLY5P/DD05-500V-471K CAP-Ceramic -P	3024003K6471	2	
41	C104,C105,C107,C108, C111,C114,C117	DE07/HCYB3F471 CAP-Ceramic -Z	3024203K2471	7	
42	C112	DE1010B471K6K 6KV CAP-Ceramic -	302A4028K4471	1	4AB5001-80 07(
43	C56	RD16XR/CK92C1H102 CAP-Ceramic -P	3034003M3102	1	
44	C21,C52,C57,C58,C60, C68-C71,C109,C110C, C118-C120	MLRD/FK16Y5V1H104Z CAP-Ceramic -N	3034003Z3104	14	
45	C115	MLRD/FK16Y5V1H473Z CAP-Ceramic -N	3034003Z3473	1	
46	C22	UVX/SME-63V-10uF 63V CAP-Alum(CE) -P	3041003J1100	1	
47	C59	UMA/50MS5-1M 50V CAP-Alum(CE) -P 1uF	3041103H1109	1	

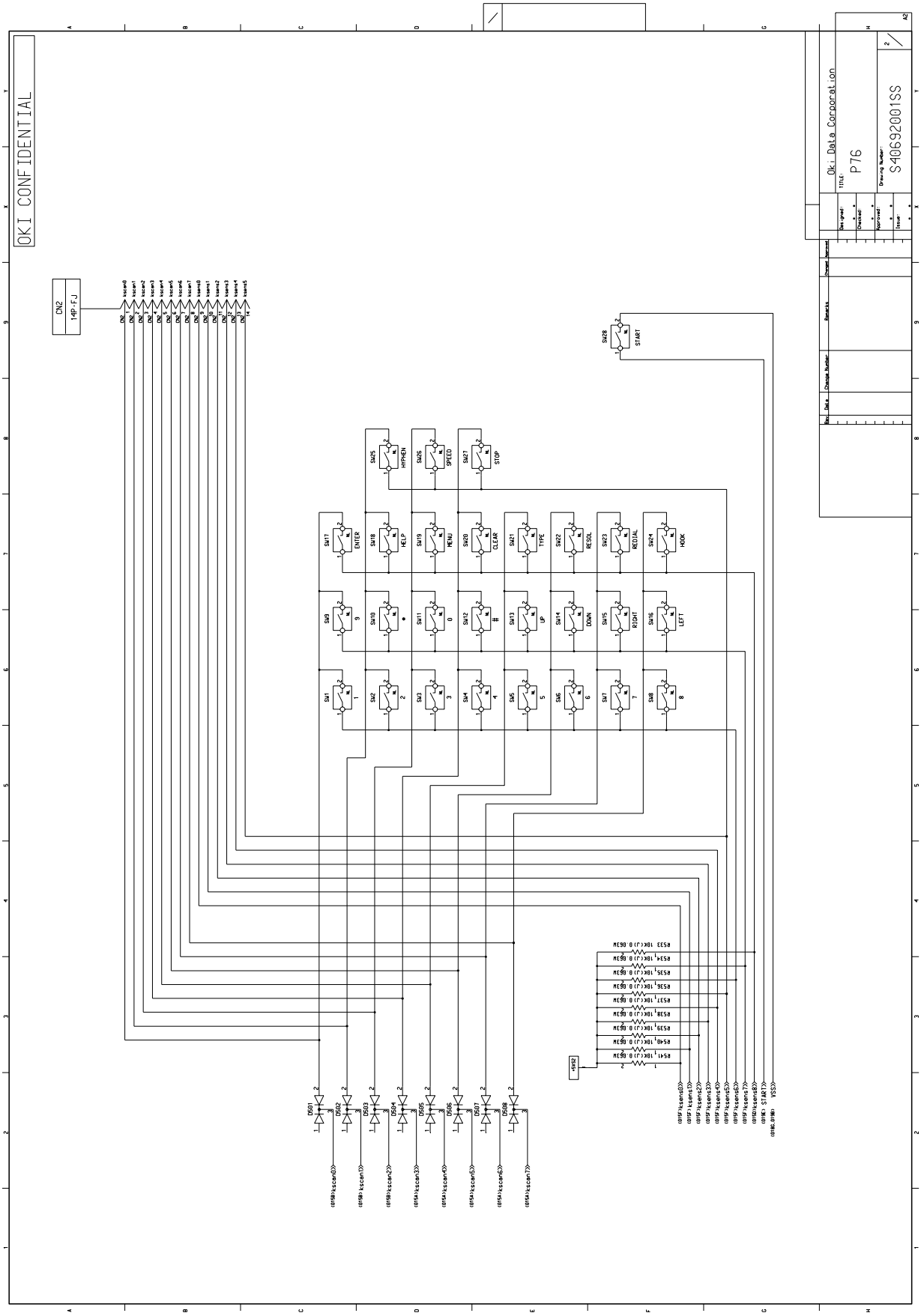
H10 PCB Assy (40660301BT) (3/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
48	C101,C106,C116	MY2A/CQMF/ECQP-103J CAP-Plast flm -P	3064003J2103	3	
49	C121	CQMF/MY2A/ECQP-472J CAP-Plast flm -P	3064003J2472	1	
50	C122	MY2A103J-T 100V CAP-Plast flm-P	3062001J2103	1	
51					
52	IC2	LC26023A-NA5 Digital IC-MOS-	7024633M2003	1	
53	IC4	324P Analog-BIPLIN -	720A0000M0002	1	
54	IC5	358P Analog-BIPLIN -	720A0000M0033		1
55	IC7	PST592D-2 Analog-BIPLIN -	720A4037M0015	1	
56	Q52	2SA608SP/2SA933S TR-PNP/H FREQ -	600A1003M0001	1	4LH-31420
57	Q53-Q57	2SA1152-K/L TR-PNP/H FREQ -	600A1123M0015	5	4LH-31420
58	Q109,Q111	2SC536SP/2SC1740S TR-NPN/H-FREQ -	602A1003M0001	2	4LH-31420
59	Q6,Q7,Q58-Q62,Q110	DTD114ESTP TR-NPN/H-FREQ -P	6021035M0001	8	
60	Q101-Q105	2SC2235-Y TR-NPN/H-FREQ -	602A1125M0039Y	5	4LH-31420
61	SW2	SM-05S-04A-9 Switch-Micro -	207A2020P0001	1	
62	OSC1	CST10.0MTW OSC-Ceramic -	381A1045B0014	1	
63	Q107	CR04AM-12 THY-Gate -	620A0022M0008	1	
64	Q106,Q108	BCR1AM-12/MAC97-008 THY-Bi/Dir -	622A0003M0001	2	
65	D128,D130,D132-D134	ERZ/JVR-05N471 SEMICO-Vari -	6320003M0001	5	
66	D131	ERZV05D391 SEMICO-Vari -	6320229M0003	1	
67	D129	ERZV05D271 SEMICO-Vari -	6320229M0004	1	
68	PS1-PS6	RPI-574/#9568 PHOTO-Coupler -	652A0103M0002	6	
69	CN1	S2P3-VH Connector-PCB -	2243019P0020	1	
70	CN2	S15B-XH-A Connector-PCB -	2243014P0150	1	
71	T2-T6	HIGH VOLTAGE TRANSFORMER	YB4049-7078P003	5	

H10 PCB Assy (40660301BT) (4/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
72	S41,S42	SHORT WIRE	TA-0.6	2	L=55mm P=10.0mm TR
73	S1-S13,S15,S17-S20, S29,S44,S79,S91	SHORT WIRE	TA-0.6	22	L=55mm P=5mm
74	S14,S21-S23,S25-S28, S30-S33,S35-S37,S39, S49,S67,S71	SHORT WIRE	TA-0.6	19	L=55mm P=7.5mm
74	S24,S34,S43,S45-S48, S51-S53,S55,S56,S58, S62,S63,S65,S68,S76, S98	SHORT WIRE	TA-0.6	19	L=55mm P=10.0mm
75	S69,S70,S72,S75,S77, S78	SHORT WIRE	TA-0.6	6	L=55mm P=12.5mm
76	S38,S50,S83-S85,S90	SHORT WIRE	TA-0.6	6	L=55mm P=15mm
77	S92-S94	SHORT WIRE	TA-0.6	3	L=55mm P=17.5mm
78	S74,S95,S97	SHORT WIRE	TA-0.6	3	L=55mm P=20mm


OKI CONFIDENTIAL
Oki Data Corporation
TITLE: P76
Drawing Number: S4069200ISS

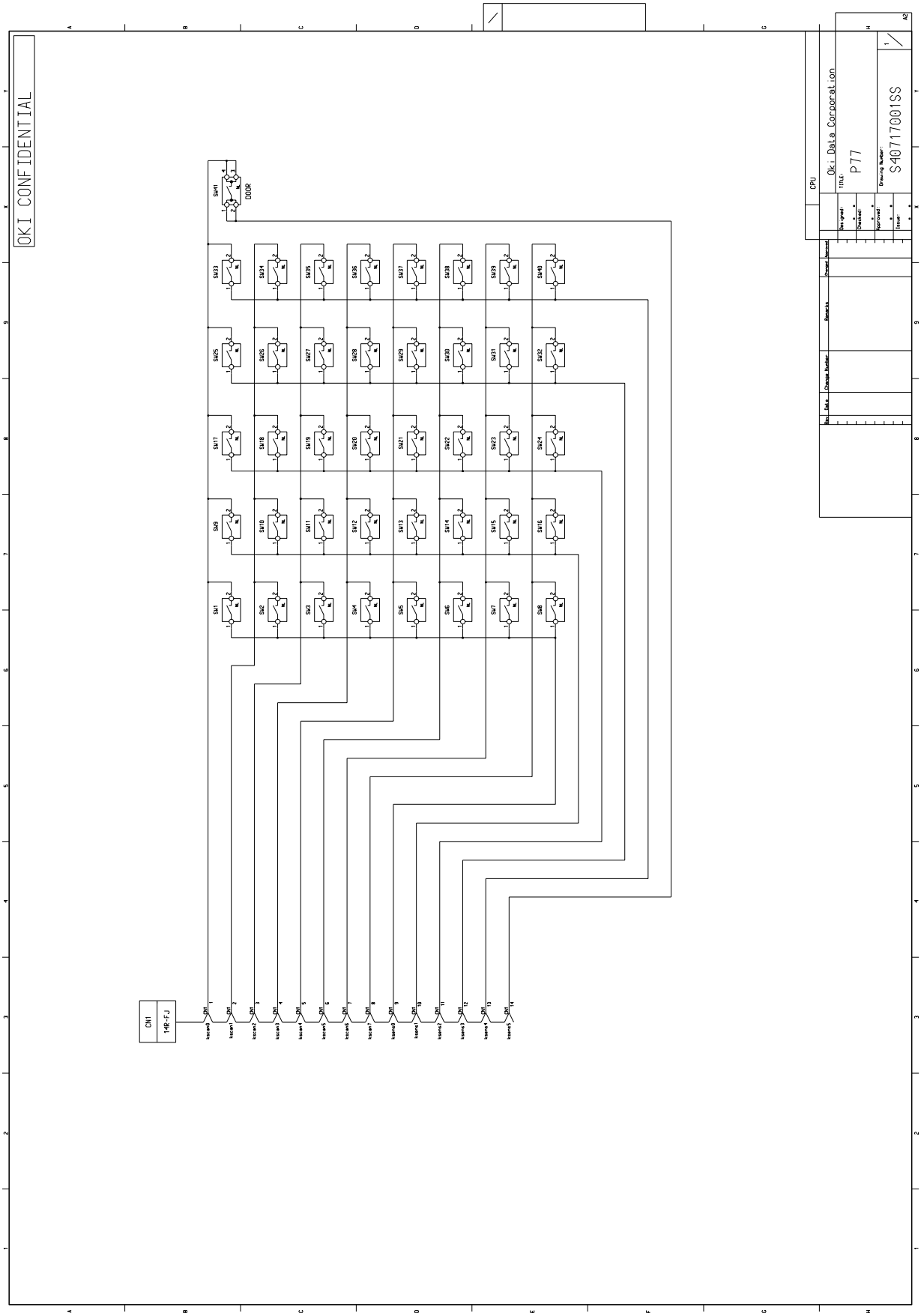

OKI CONFIDENTIAL
Oki Data Corporation
TITLE: P76
Drawing Number: S4069200ISS
CN2
14P-FJ
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
SW13
SW14
SW15
SW16
SW17
SW18
SW19
SW20
SW21
SW22
SW23
SW24
SW25
SW26
SW27
SW28
START
STOP
SPEED
HYPHEN
ENTER
HELP
MENU
CLEAR
TYPE
REDIAL
HOOK
LEFT
RIGHT
DOWN
UP
D501
D502
D503
D504
D505
D506
D507
D508
+5VK2
VSS

P76 PCB Assy (40692001BT) (1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D501-D508	SS100MA80VKCP D-Signal -C	611A0000N0002	8	
2					
3	R515	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	1	
4	R522-R525	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	4	
5	R532	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	1	
6	R512,R514,R521,R533-R541	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	12	
7	R531	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	1	
8	R502	CR/RK73K/ERJ/MCRJ301 RES-MET RN -C	3235003J0301	1	
9	R510	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	1	
10	R513,R516-R518,R526,R527	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	6	
11	R528	CR/RK73K/ERJ/MCRJ474 RES-MET RN -C	3235003J0474	1	
12	R504-R509,R511	RM73B2A221J RES-MET RN -C	323A5003J0221	7	
13	R501	RK73K2H/CR1/2-151J RES-MET RN -C	3235103J0151	1	
14					
15	C537,C539	CC2012SL1H101J 50V CAP-Ceramic -C	303A3007K0101	2	
16	C538	CC2012SL1H221J 50V CAP-Ceramic -C	303A3007K0221	1	
17	C527,C528	CC2012SL1H471J 50V CAP-Ceramic -C	303A3007K0471	2	
18	C533-C535	CK2012B1H102K 50V CAP-Ceramic -C	303A6008K3102	3	
19	C505,C536	CK2012B1H472K 50V CAP-Ceramic -C	303A6008K3472	2	
20	C504,C524,C552	CK2012F1C474Z 16V CAP-Ceramic -C	303A6008Z1474	3	
21	C502,C525,C532,C541-C543,C548	CK2012F1H104Z 50V CAP-Ceramic -C	303A6008Z3104	7	
22					
23	C40	50MS5-0.68M 50V CAP-Alum(CE) -	304A1046H1688	1	
24	C1,C6,C16	UVX/SME-16V-47uF 16V CAP-Alum(CE) -P	3041003C1470	3	
25					

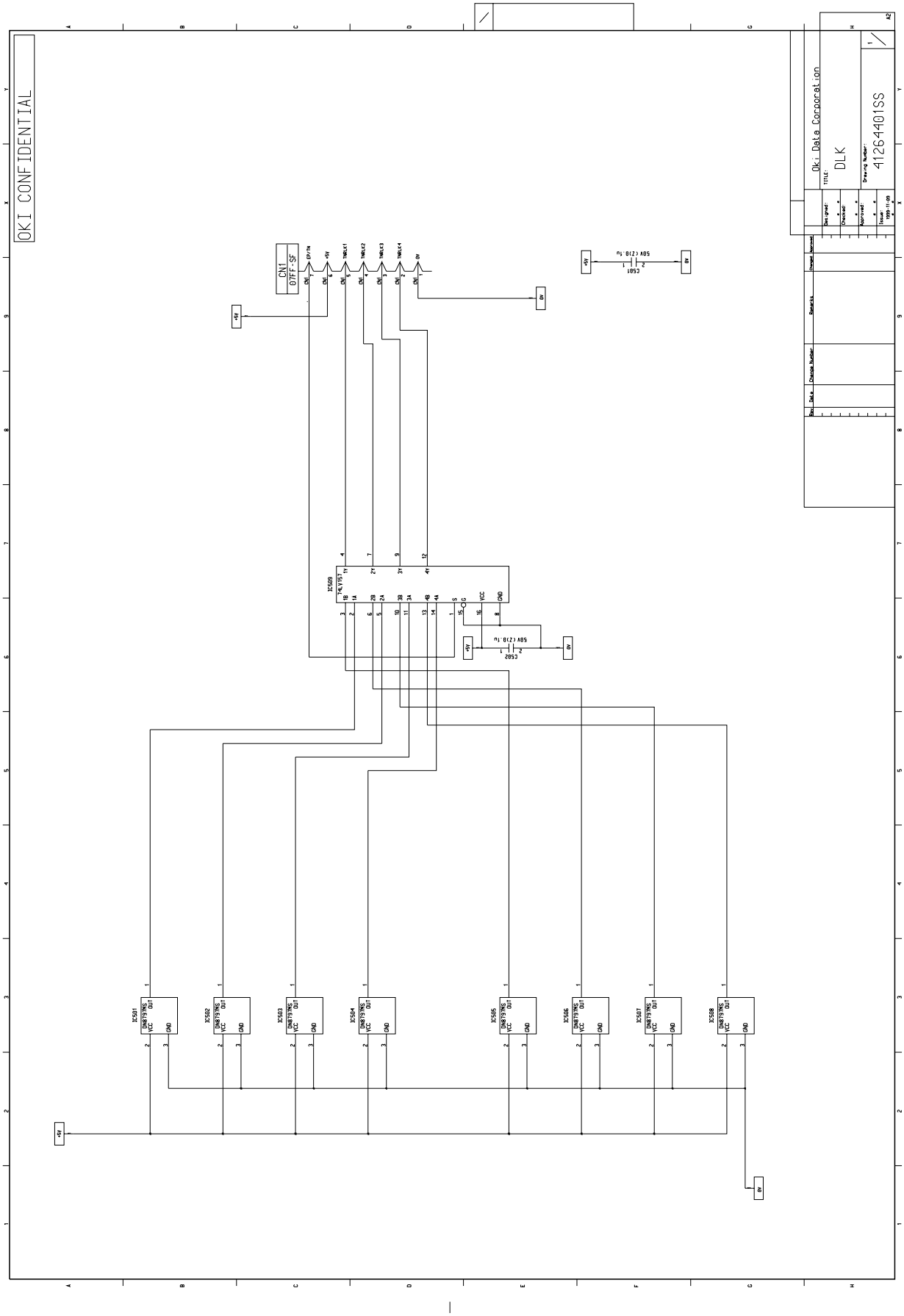
P76 PCB Assy (40692001BT) (2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	IC503	74HC08FP Digital IC-MOS-S	702A1703N0008	1	
27	IC505	74HC32FP Digital IC-MOS-S	702A1703N0032	1	
28	IC504	74HC126FP Digital IC-MOS-S	702A1703N0126	1	
29	IC502	M51957AFP Analog-BIPLIN -S	7200022N0001	1	
30	IC1	M38002M2-420SP CPU-MOS (ROM) -	8530183M0006	1	
31					
32	L1	GL3HD8 PHOTO-LED -	650A0128M0030	1	
33	L2-L7,L9	GL3HY8 PHOTO-LED -	650A0228M0010	7	
34					
35	OSC	CST6.00MGW121 OSC-Ceramic -	381A1048B0003		1
36					
37	JP1,JP2	SMRJ-B-7/0.16-7X115 CONN PAR- -	238A1079P0001	2	
38					
39	CN1	S16B-PH-K-S Connector-PCB -	224A3531P0160	1	
40	CN2	14P-FJ Connector-PCB -	2243015P0140	1	
41					
42	SW1-SW28	EVQ11004K	2051004P1000	28	
43					
44	LCD1	ED20410GR		1	


OKI CONFIDENTIAL
Oki Data Corporation
P77
S40717001SS
CPU
DOOR
CN1
14R-FJ

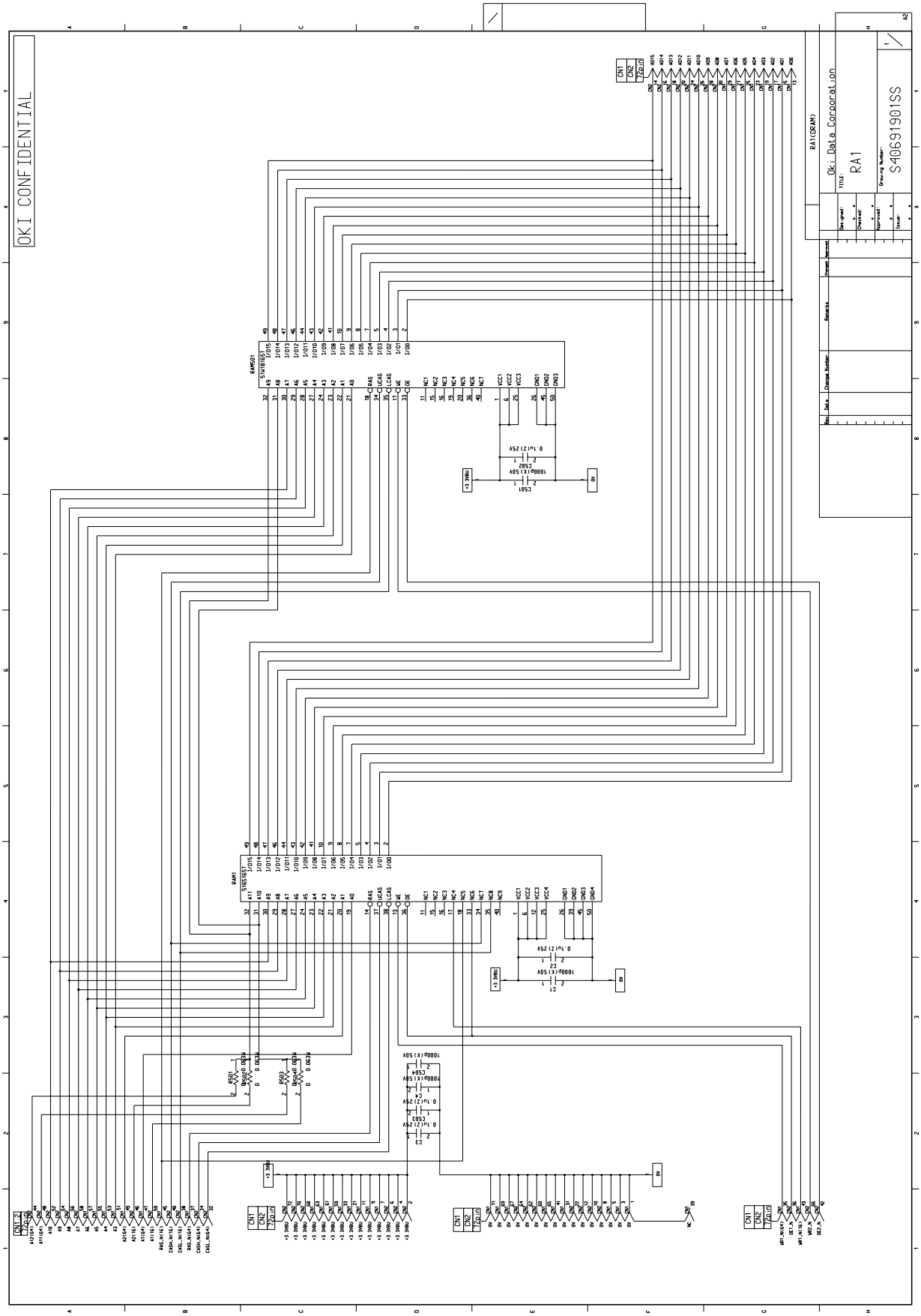
P77 PCB Assy (40717001BT) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	CN1	14R-FJ Connector-PCB -	2243016P0140	1	
2					
3	SW1-SW40	EVQ11004K	2051004P1000	40	
4					
5	SW41	ESE11SV1	2051002P1000	1	
6					
7	S1-S24	SHORT WIRE	TA-0.6	24	L=32MM P=10.16


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
DLK
Drawing Number:
41264401SS
Issue
Checked
Approved
Remarks
Change Number
Date
Rev
CN1
07FF-SF
+5V
0V
TMCK1
TMCK2
TMCK3
TMCK4
C501
C502
IC501
IC502
IC503
IC504
IC505
IC506
IC507
IC508
IC509
74HCT157
DN8979NS
VCC
GND
OUT

DLK PCB Assy (41264401BT) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C501,C502	CK2012F1H104Z 50V CAP-Ceramic -C	303A6008Z3104	2	
2	CN1	07FF-SF Connector-PCB -	2243100P0070	1	
3	IC501-IC508	DN8797MSA-TXL Convert-MG.E -C	6410032N0001	8	
4	IC509	HD74LV157ATEL Digital IC-MOS-B	7022421N3157	1	


OKI CONFIDENTIAL
Oki Data Corporation
RA1
S406901SS
RA1(DRAM)

RA1 PCB Assy (2MB) (40691901BT) (1/1)

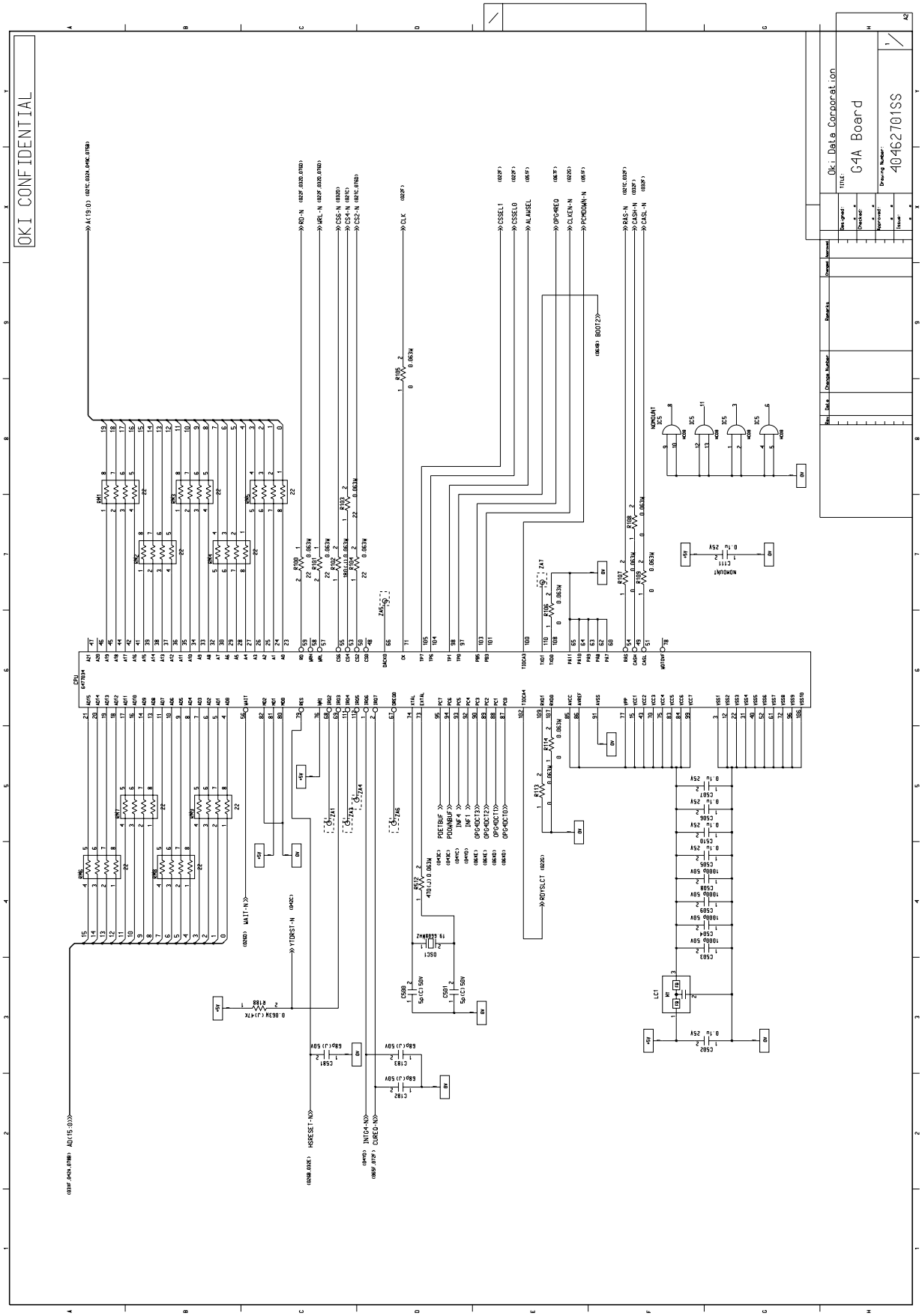
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R501,R503	CR/RK73Z/ERJ/MCRJ-0V	3255003P0001 RES-Zero Ω -C	2	
2					
3	C1,C4,C501,C504	GRM/UMK/MCH/ 102B CAP-Ceramic -C	3036003K0102	4	
4	C2,C3,C502,C503	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	4	
5					
6	RAM1	4161204L-60TS Memory-MOSDRAM-S	8020003N4606	1	

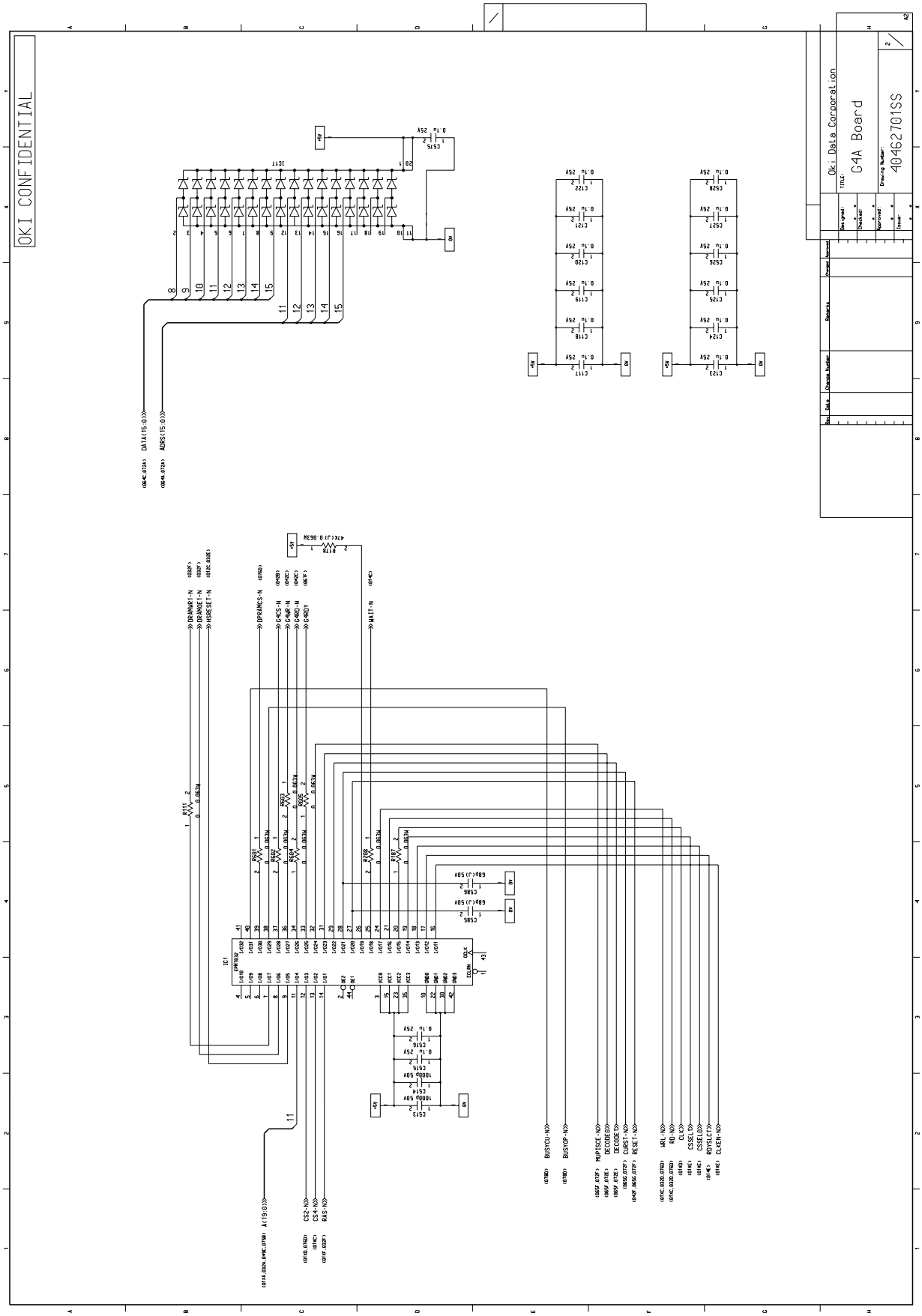
RA1-2 PCB Assy (4MB) (40691902BT) (1/1)

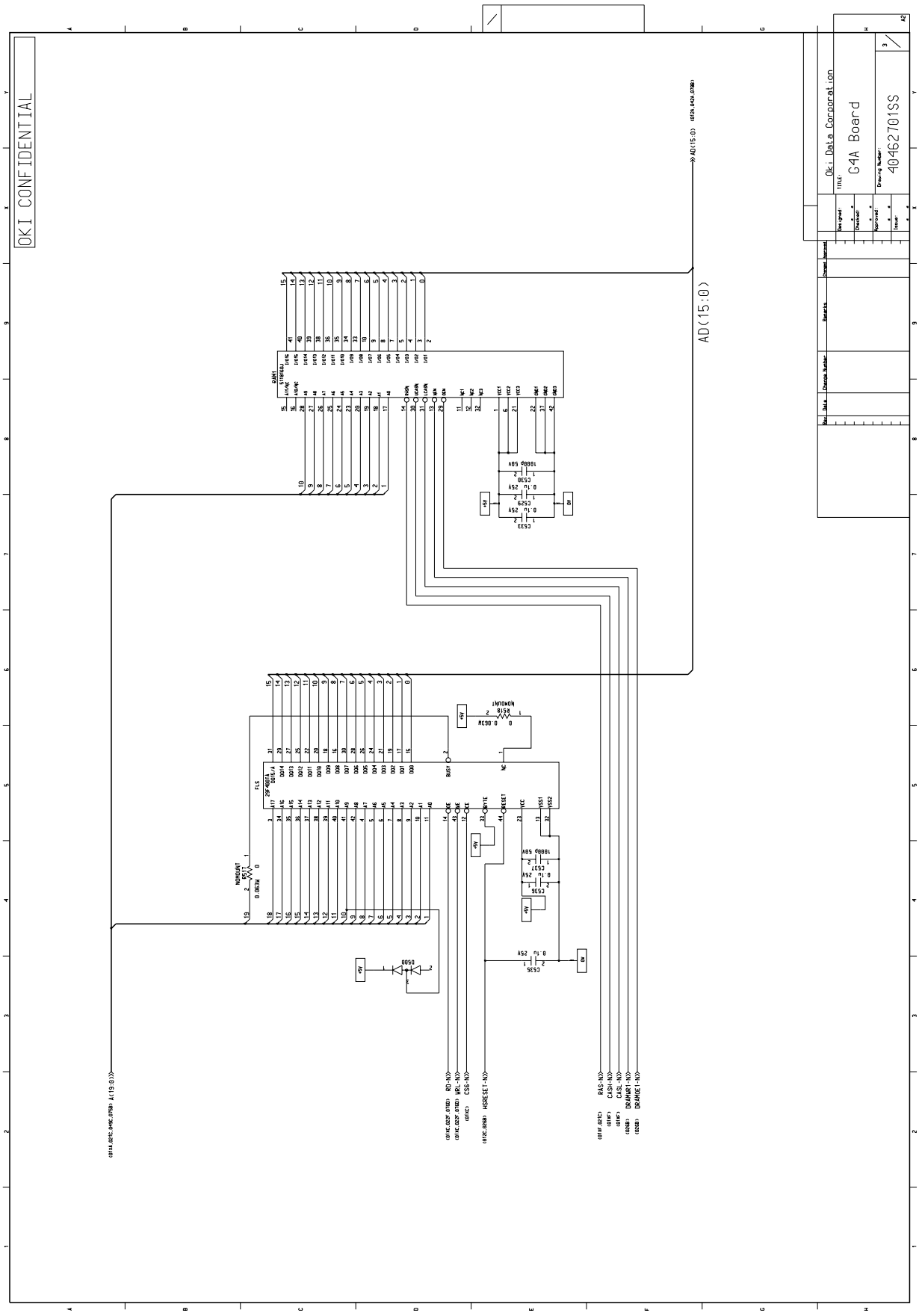
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R501,R503	CR/RK73Z/ERJ/MCRJ-0V	3255003P0001 RES-Zero Ω -C	2	
2					
3	C1,C4,C501,C504	GRM/UMK/MCH/ 102B CAP-Ceramic -C	3036003K0102	4	
4	C2,C3,C502,C503	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	4	
5					
6	RAM1,RAM501	4161204L-60TS Memory-MOSDRAM-S	8020003N4606	2	

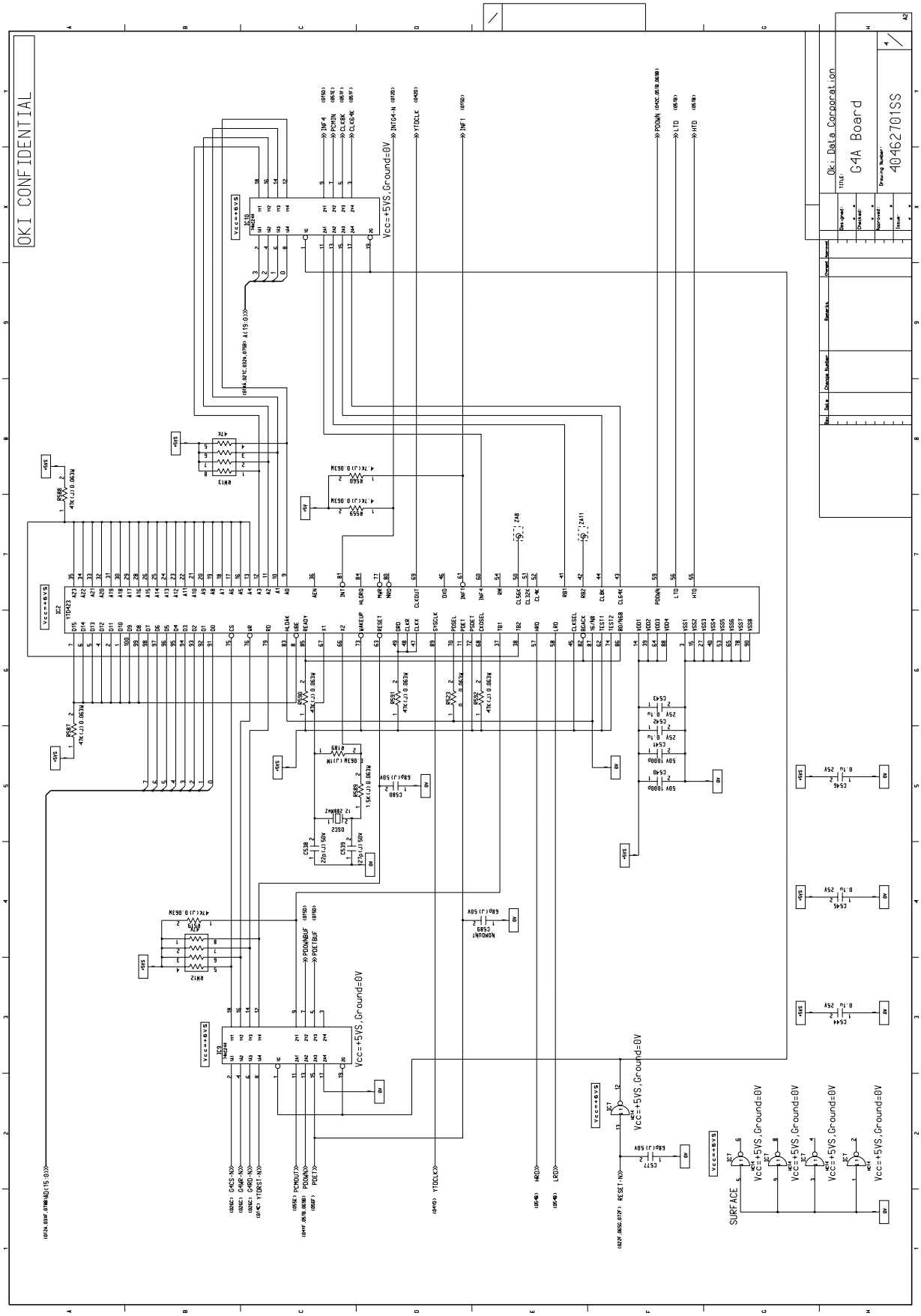
RA1-3 PCB Assy (8MB) (40691903BT) (1/1)

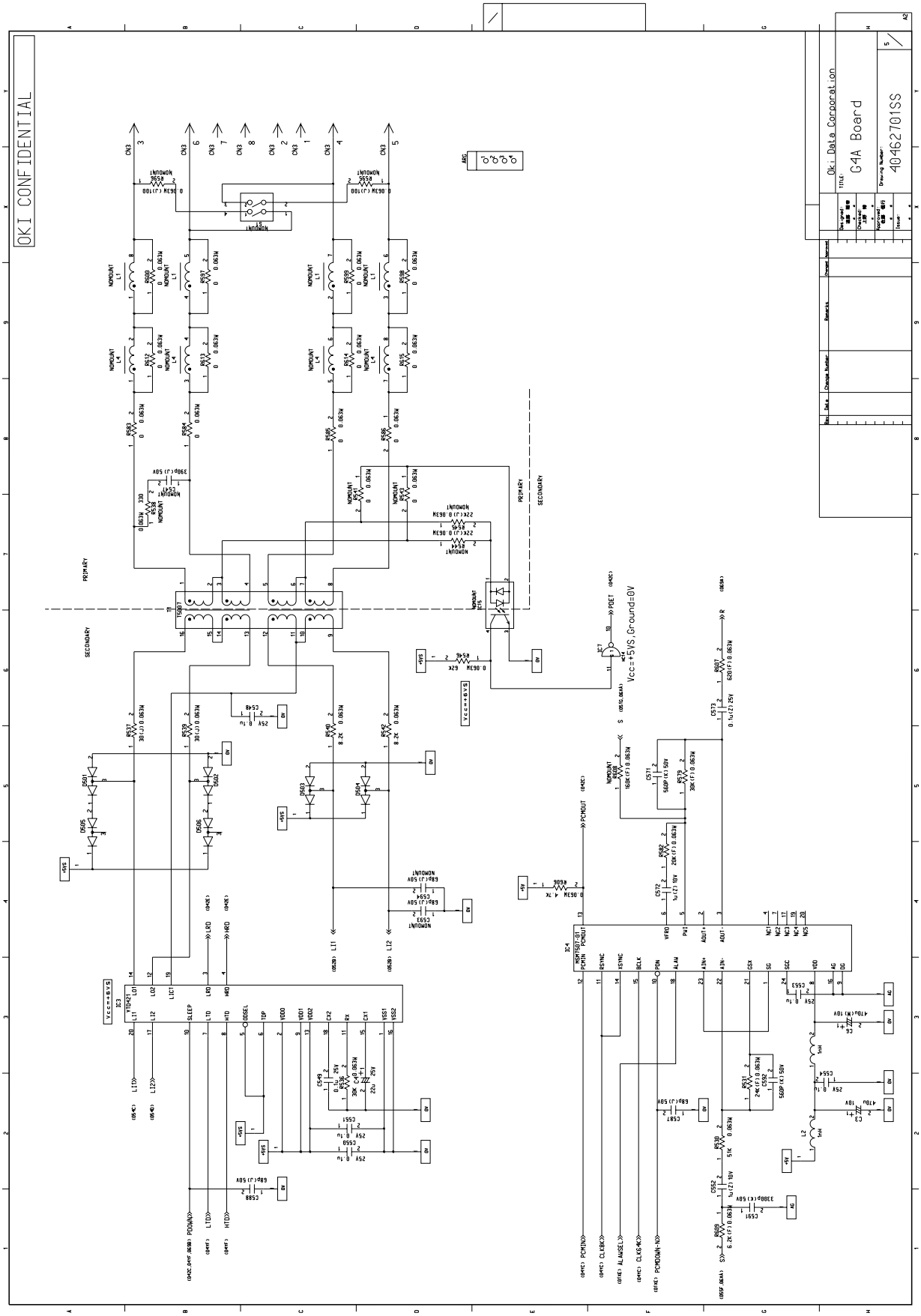
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R501,R503	CR/RK73Z/ERJ/MCRJ-0V RES-Zero Ω -C	3255003P0001	2	
2					
3	C1,C4,C501,C504	GRM/UMK/MCH/ 102B CAP-Ceramic -C	3036003K0102	4	
4	C2,C3,C502,C503	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	4	
5					
6	RAM1	OR-Memory-MOSDRAM-S	40914901	1	4RP

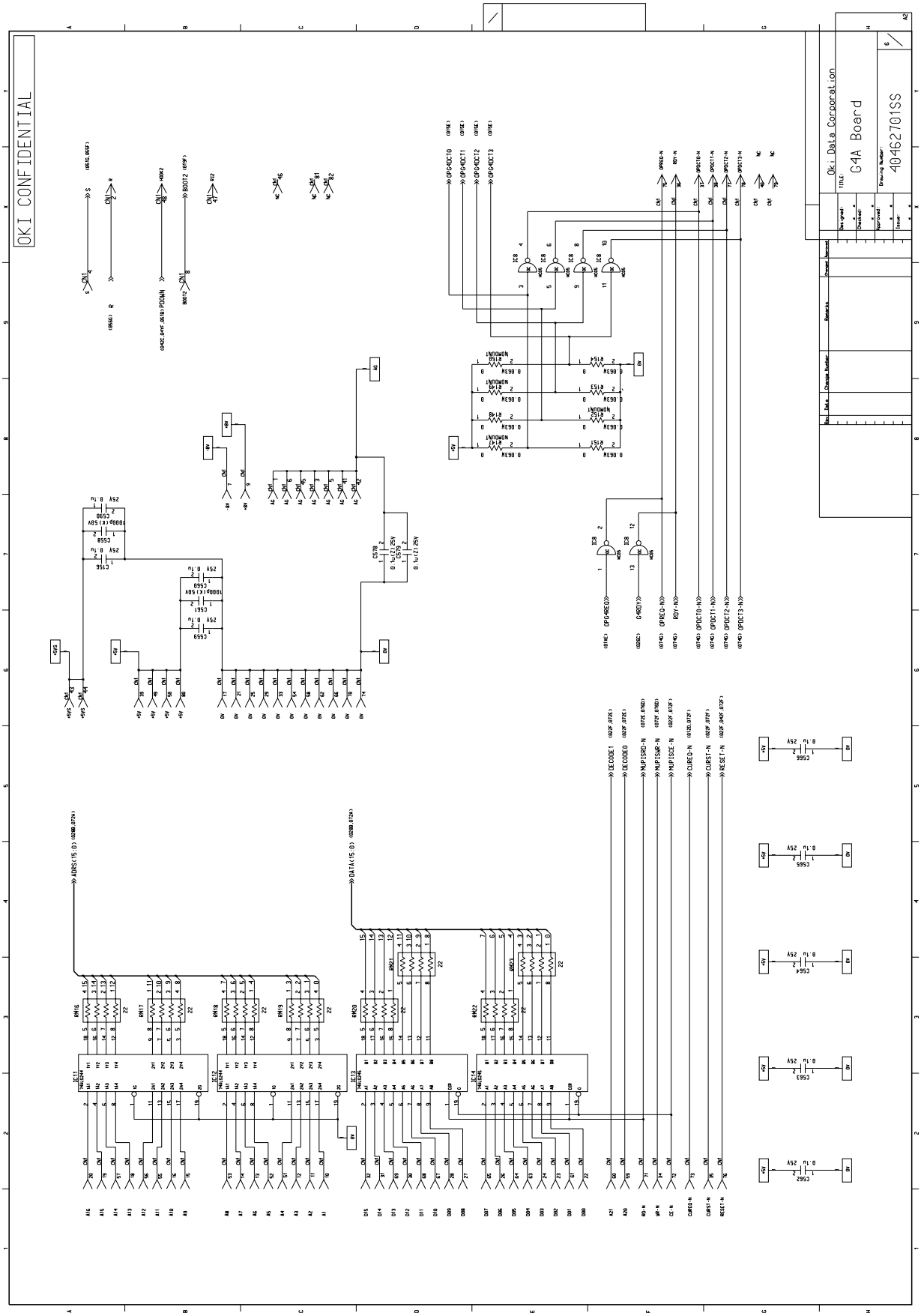

OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
C4A Board
Drawing Number:
4046270ISS
Issue
Approved
Checked
Designed

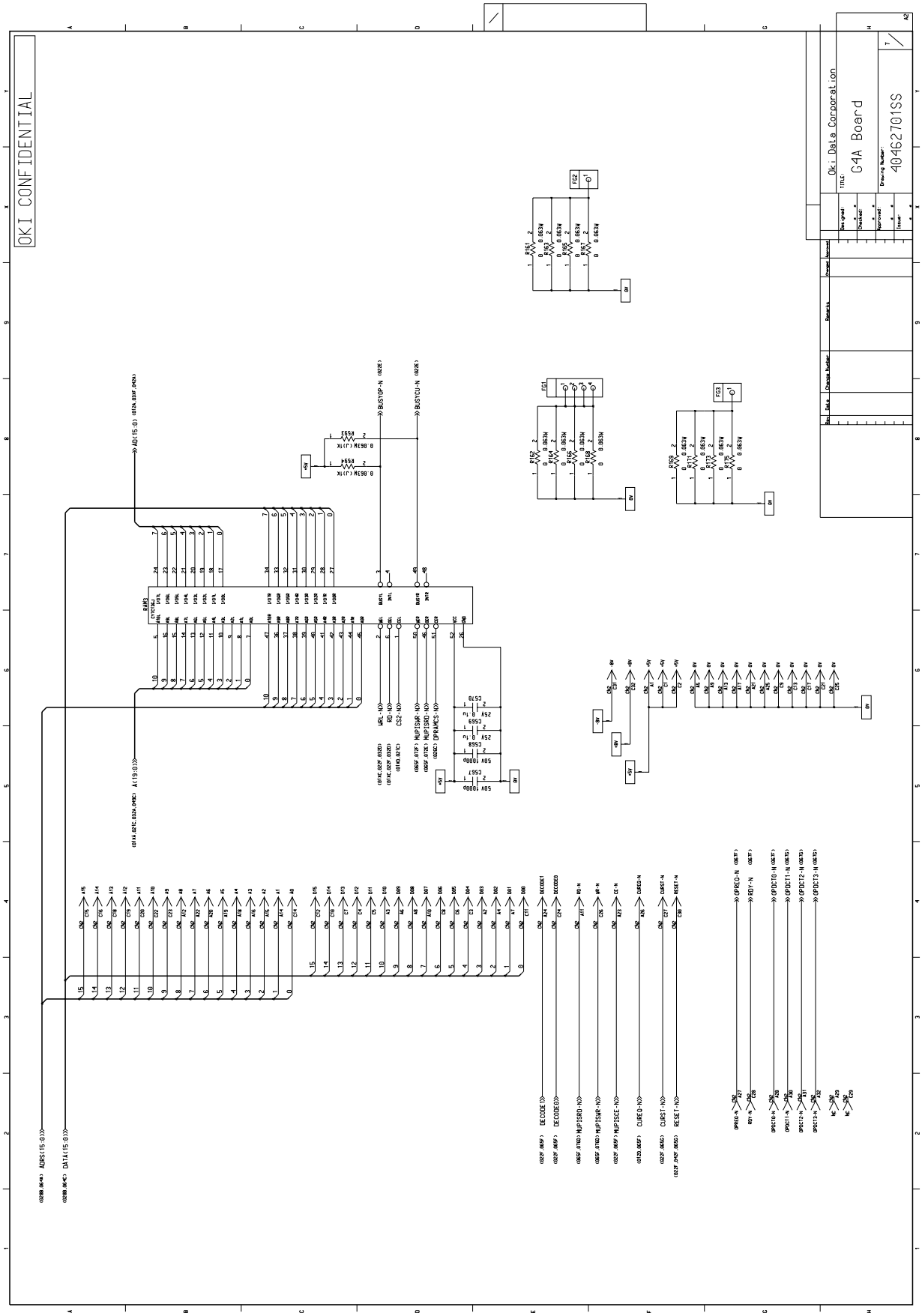

OKI CONFIDENTIAL
Oki Data Corporation
TITLE
G4A Board
Drawing Number
4046270ISS
Designed
Checked
Approved
Issue
Rev.
Date
Change Number
Remarks
Drawn
Approved
A2
DATA(15:0)
ADRS(15:0)
DRAMWE1-N
DRAMWE-N
HSRESET-N
DRAMCS-N
G4CS-N
G4WR-N
G4RD-N
G4RDY
WAIT-N
A(19:0)
CS2-N
CS3-N
RAS-N
BUSYCU-N
BUSYOP-N
MAPSCE-N
DECODE0
DECODE1
CURST-N
RESET-N
ADR-N
RD-N
CLK
CSSEL0
CSSEL1
RDYSLCT
CLKEN-N


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
G4A Board
Drawing Number:
4046270ISS
AD(15:0)


OKI CONFIDENTIAL
Oki Data Corporation
G4A Board
4046270ISS
Vcc=+5VS,Ground=0V
SURFACE


OKI CONFIDENTIAL
Oki Data Corporation
G4A Board
4046270ISS
Vcc=+5VS,Ground=0V


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
G4A Board
Drawing Number:
40462701SS
Issue:
Designed:
Checked:
Approved:
Remarks
Change Number
Date
Drawn
Revised
A2


OKI CONFIDENTIAL
Oki Data Corporation
TITLE
G4A Board
Drawing Number
4046270ISS
Designed
Checked
Approved
Issue
Rev. Date Change Number Remarks Drawn Approved
A2

G4A PCB Assy (40462702BT) (1/3)

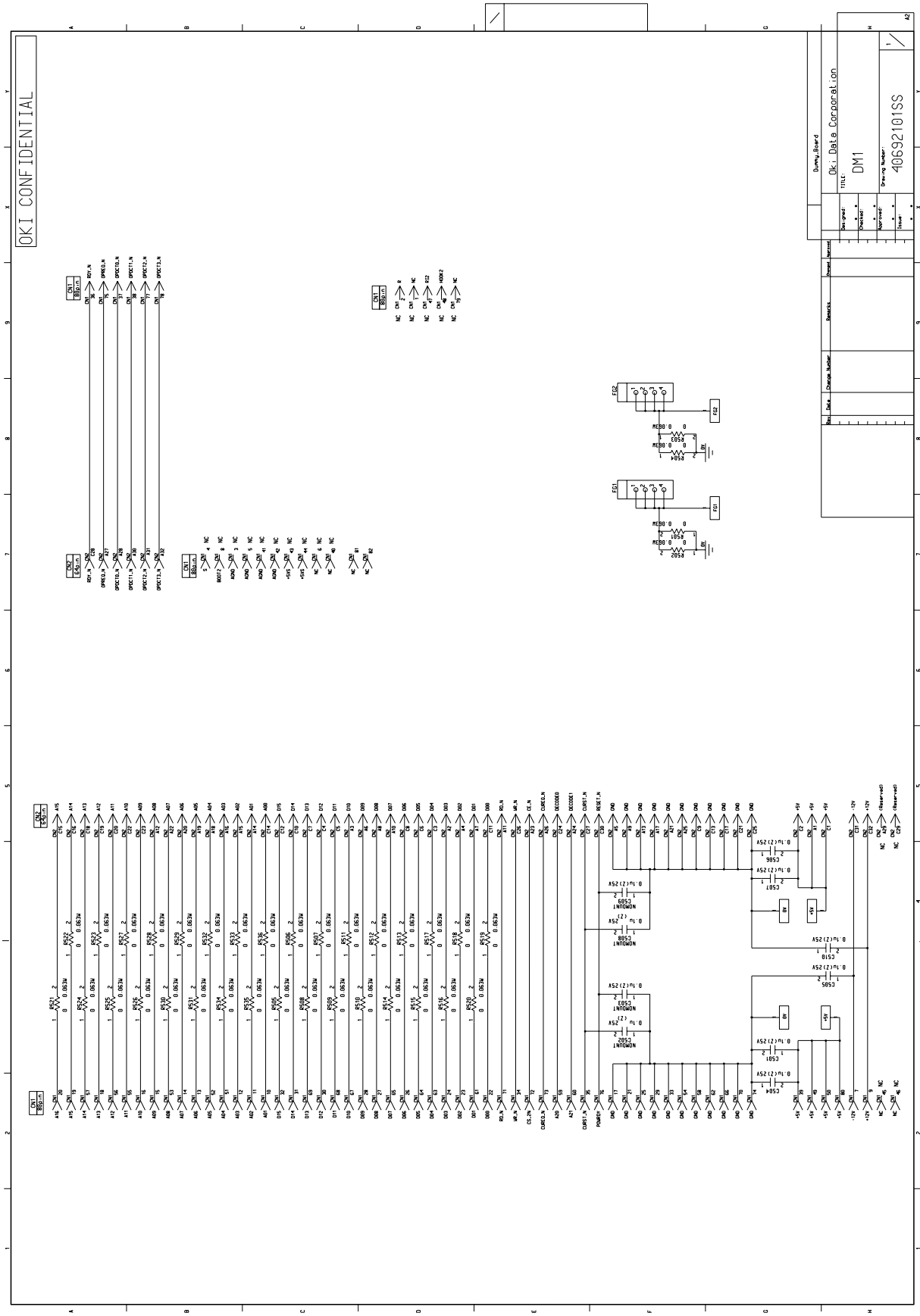
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	CN1	TX24-80R-6ST-H1 Connector-PCB -	2244111P0800	1	
2	CN2	00-8345-396-949-014 Connector-PCB -	224A3618P0640	1	
3	CN3	TM5RL-88 Connector-Plug-	223A3435P0001	1	
4					
5	C3,C6	KMG10VB-470M-FC 10V CAP-Alum(CE) -	304A1180A1471	2	
6	C4	UVX/SME25VB-22-OA CAP-Alum(CE) -P	3041103E1220	1	
7					
8	C500,C501	GRM/UMK/MCH/050CH CAP-Ceramic -C 5pF	3033003C0050	2	
9	C538	GRM/UMK/MCH/220CH CAP-Ceramic -C	3033003C0220	1	
10	C539	GRM/UMK/MCH/270CH CAP-Ceramic -C	3033003C0270	1	
11					
12	C182,C183,C577,C580, C581,C585-C588,C593, ,C594	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	11	
13	C503,C504,C508,C509, C513,C514,C530,C537, C540,C541,C558,C561, C567,C568	GRM/UMK/MCH/ 102B CAP-Ceramic -C	3036003K0102	14	
14	C571,C592	GRM/UMK/MCH/561B 50V	3036003K0561 CAP-Ceramic	2 -C	
15	C591	GRM/UMK/MCH/ 332B	3036003K0332 CAP-Ceramic	1 -C	
16	C552,C572	GRM/LMK/MCH/105Z 10V	3036003Z0105 CAP-Ceramic	2 -C	
17	C117-C125,C156,C502, C505-C507,C510,C515, C516,C526-C529,C533, C535,C536,C542-C546, C548-C551,C553,C554, C559,C560,C562-C566, C569,C570,C573,C575, C578,C579,C590	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	49	
18					
19	R582	CR/RK73H/ERJ/MCRF203 RES-MET RN -C	3235003F0203	1	
20	R579	CR/RK73H/ERJ/MCRF303 RES-MET RN -C	3235003F0303	1	
21	R609	CR/RK73H/ERJ/MCRF622 RES-MET RN -C	3235003F0622	1	
22	R607	CR/RK73H/ERJ/MCRF621 RES-MET RN -C	3235003F0621	1	

G4A PCB Assy (40462702BT) (2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
23	R593,R594	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	2	
24	R189	CR/RK73K/ERJ/MCRJ105 RES-MET RN -C	3235003J0105	1	
25	R589	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	1	
26	R102	CR/RK73K/ERJ/MCRJ181 RES-MET RN -C	3235003J0181	1	
27	R100,R101,R103,R104	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	4	
28	R531	CR/RK73H/ERJ/MCRF243 RES-MET RN -C	3235003F0243	1	
29	R536	CR/RK73K/ERJ/MCRJ303 RES-MET RN -C	3235003J0303	1	
30	R530	CR/RK73H/ERJ/MCRF513 RES-MET RN -C	3235003F0513	1	
31	R537,R539	CR/RK73K/ERJ/MCRJ300 RES-MET RN -C	3235003J0300	2	
32	R512	CR/RK73K/ERJ/MCRJ471 RES-MET RN -C	3235003J0471	1	
33	R559,R560,R606	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	3	
34	R178,R188,R519,R587, R588,R590-R592	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	8	
35	R546	CR/RK73K/ERJ/MCRJ623 RES-MET RN -C	3235003J0623	1	
36	R540,R542	CR/RK73K/ERJ/MCRJ822 RES-MET RN -C	3235003J0822	2	
37	R105-R109,R111,R113, R114,R148,R151,R153, R154,R161-R169,R171, R173,R175,R187,R208, R523,R583-R586,R597 -R605	CR/RK73Z/ERJ/MCRJ-0V RES-Zero Ω -C	3255003P0001	40	
38					
39	RM1-RM9,RM16-RM23	CN1J4/EXBV8V22ΩJ RES-Block -C	3345003J0220	17	
40	RM12-RM13	CN1J4/EXBV8V47KΩJ RES-Block -C	3345003J0473	2	
41					
42	D500-D506	SS100MA80VSCP D-Signal -C	611A0000N0003	7	
43					
44	IC1	EPM7032SLC44-10-D001 Memory-PLA -L	8180337N0001	1	
45	IC2	YTD423D-S 8550846N0001 CPU-Interface -F	1		

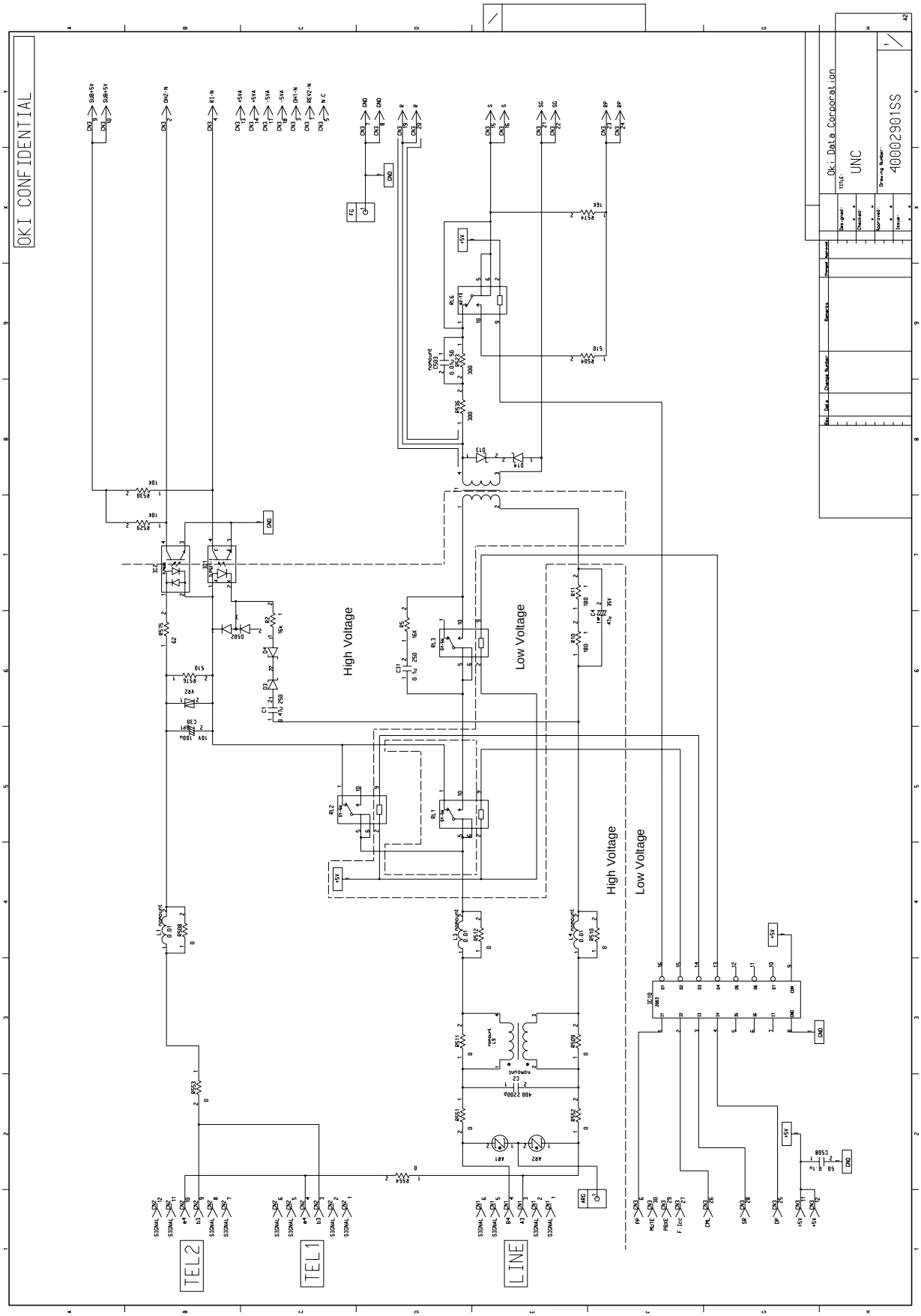
G4A PCB Assy (40462702BT) (3/3)

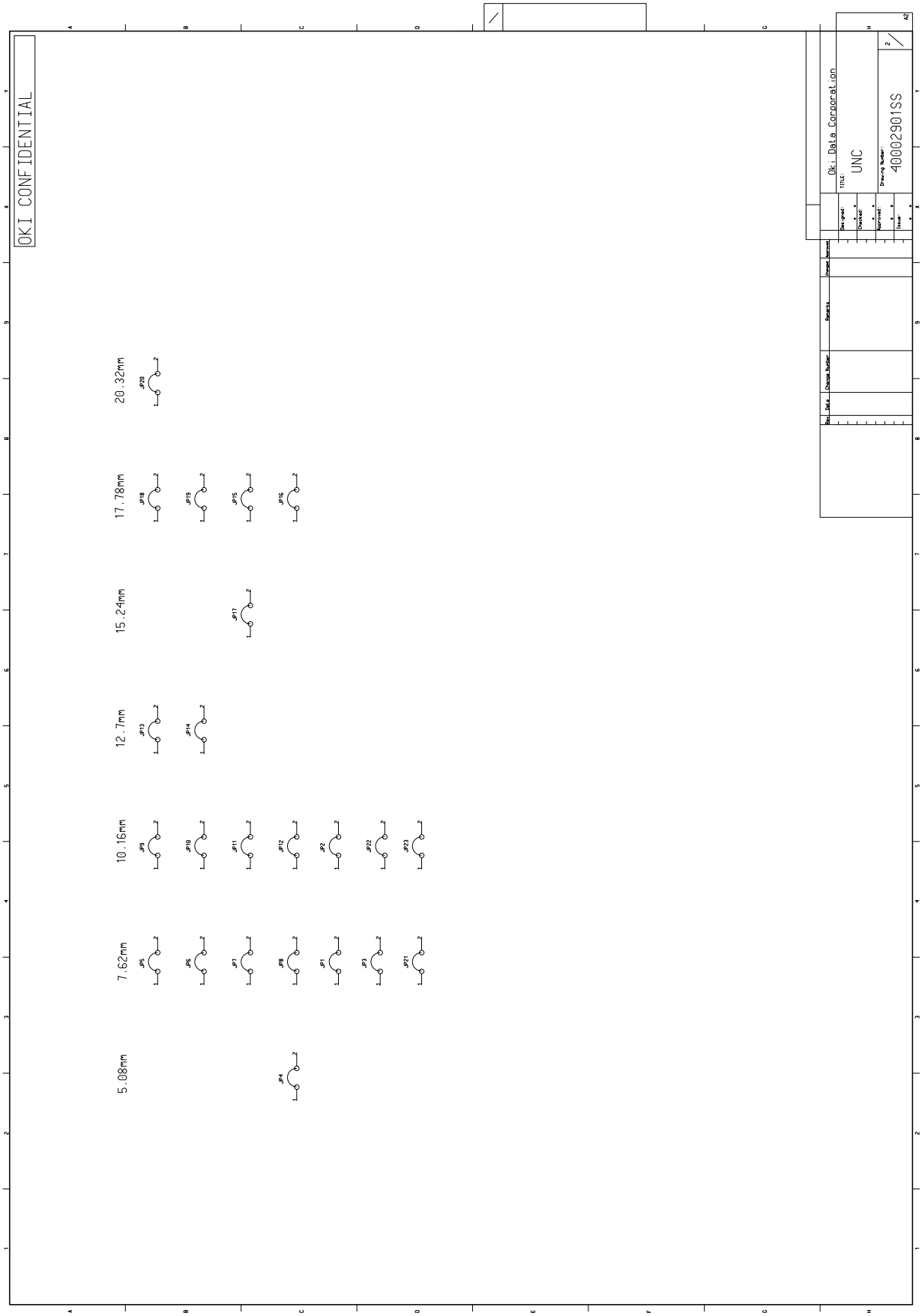
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
46	IC3	YTD421B-E Analog-MOSdata-S	7324046N0001	1	
47	IC4	MSM7507-01GS-K Analog-MOSdata-S	7324024N0001	1	
48	IC7	74HC14FP Digital IC-MOS-S	702A1703N0014	1	
49		IC8 74HC05FP Digital IC-MOS-S	702A1703N0005	1	
50	IC9,IC10	74HC244FP Digital IC-MOS-S	702A1703N0244	2	
51	IC11,IC12	74ALS244AFP Digital IC-BIP-S	700A2503N0244	2	
52	IC13,IC14	74ALS245AFP Digital IC-BIP-S	700A2503N0245	2	
53					
54	IC17	SN74S1053NS Digital IC-BIP-S	7001050N1053	1	
55					
56	RAM1	OR-Memory-MOSDRAM-S	41087601	1	4RP
57	RAM3	71321LA55J Memory-MOSSRAM-L	8040003N4301	1	
58					
59	FLS	FLASH MEM.IC	41317101	1	4YR
60					
61	CPU	HD6437034AE08F CPU-MOS (ROM) -F	8530432N0005	1	
62					
63	OSC1	HC-49/U03C-19.66MHz OSC-Crystal -C	3801001B0002	1	
64	OSC2	HC-49/U03C-12.288MHz OSC-Crystal -C	3801001B0001	1	
65					
66	LC1	MT-Y223NB COMP PAR-LC -	342A1013N0223	1	
67					
68	T1	PE-65795 TFORMER-Pulse -S	3655000P0001	1	
69					
70	L2,L3	LHL10-102J Coil-HF -	353A1013J0102	2	
71	L4	PE-65950 Common Mode Choke		1	


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
DM1
Drawing Number:
4069210ISS
Dummy Board

DM1 PCB Assy (4066992101BT) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R505-R536	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	32	
2					
3	C501 ,C504-C507 ,C510	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	6	
4					
5	CN2	00-8345-396-949-014 Connector-PCB -	224A3618P0640	1	
6	CN1	TX24-80R-6ST-H1 Connector-PCB -		1	


OKI CONFIDENTIAL
Oki Data Corporation
UNC
400029015S
High Voltage
Low Voltage
High Voltage
Low Voltage
TEL2
TEL1
LINE

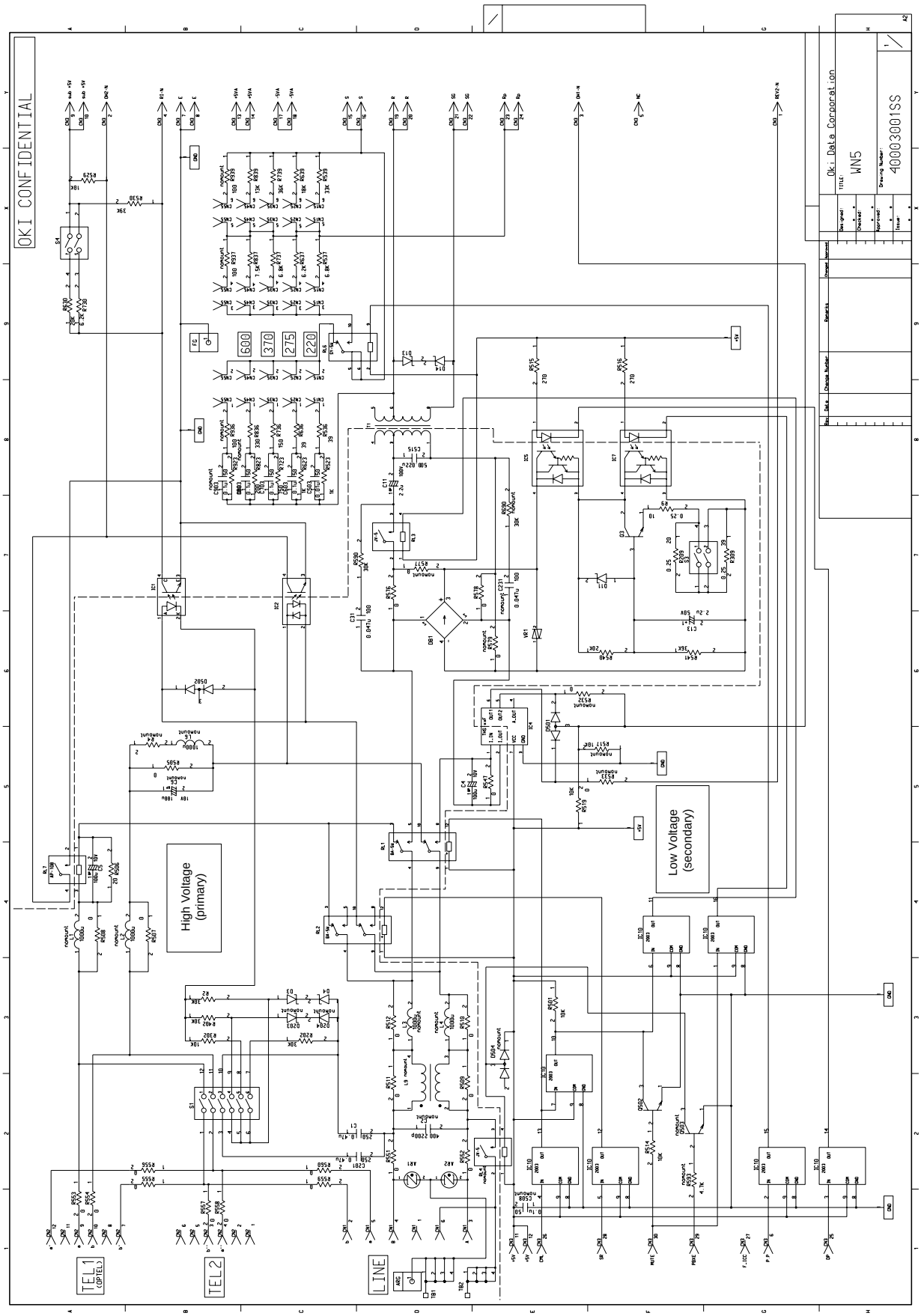

OKI CONFIDENTIAL
20.32mm
17.78mm
15.24mm
12.7mm
10.16mm
7.62mm
5.08mm
JP20
JP18
JP19
JP15
JP16
JP17
JP13
JP14
JP9
JP10
JP11
JP12
JP2
JP22
JP23
JP5
JP6
JP7
JP8
JP1
JP3
JP21
JP4
Oki Data Corporation
TITLE:
UNC
Drawing Number:
40002901SS
Issue:
Approved:
Checked:
Designed:
Remarks
Change Number
Date
Rev.

UNC PCB Assy (40002903BT) (1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	AR1,AR2	RH412-351MFT SRH412-351MFT	5431002G0351	2	
2					
3	C1	ECQ-E2474KF 250V CAP-Plast flm -	306A2221K5474	1	
4	C4	SME35VB47BP 35V CAP-Alum(CE) -P	3041203V1470	1	
5	C30	SME10VB-100BP-OA 10V CAP-Alum(CE) -	304A1122A1101	1	
6	C31	ECQ-E2104KF 250V CAP-Plast flm -	306A2221K5104	1	
7	C508	CK2012F1H104Z 50V CAP-Ceramic -C	303A6008Z3104	1	
8					
9	CN1	TM5RE2V-66 Connector-Plug-	2233001P0001	1	
10	CN2	TM5RE3V-1212 Connector-Plug-	2233002P0001	1	
11	CN3	1-176837-4 Connector-PCB -	224A4335P0300	1	
12					
13	IC1	TLP521-1-GR PHOTO-Coupler -	652A0125M0008	1	
14	IC2	TLP620 PHOTO-Coupler -	6520125M0001	1	
15	IC10	2003P ARRAY-TR -	760A0403M0701	1	
16					
17	D3,D4	RD20E-B D-Zener -	613A1231L0252	2	4KH-31051-102
18	D13,D14	RD8.2E-B D-Zener -	613A1231L0162	2	4KH-31051-102
19	D502	SS100MA80VSCP D-Signal -C	611A0000N0003	1	
20					
21	R2,R5	MOR1B16KΩJ RES-MET OX -	324A1111J0163	2	4KH-31050-152 W
22	R10,R11	MOR1B180ΩJ RES-MET OX -	324A1111J0181	2	4KH-31050-152 W
23	R504,R576	RM73B2A511J RES-MET RN -C	323A5003J0511	2	
24	R529,R530	RM73B2A103J RES-MET RN -C	323A5003J0103	2	
25	R508-R512,R551-R554	2125JPW RES-MET RN -C	323A5003P0001	9	

UNC PCB Assy (40002903BT) (2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	R523,R536	RM73B2A301J RES-MET RN -C	323A5003J0301	2	
27	R574	RM73B2A163J RES-MET RN -C	323A5003J0163	1	
28	R575	RM73B2A620J RES-MET RN -C	323A5003J0620	1	
29					
30	RL1-RL3,RL6	SY-5W-K Relay-General -	2601006P1000	4	
31					
32	T1	95U TFORMER-LF -	3613100P0001	1	
33	T1	Shild-Case	40332101	1	
34	T1	Shild-Case	40332102	1	
35	VR2	VR-61SS SEMICO-Vari -	632A0030M0011	1	4KH-31051-127
36					
37	JP1,JP3,JP5-JP8,JP21	SHORT WIRE	TA-0.6	7	L=32MM P=7.5
38	JP2,JP9-JP12,JP22, JP23	SHORT WIRE	TA-0.6	7	L=32MM P=10
39	JP4	SHORT WIRE	TA-0.6	1	L=32MM P=5.0
40	JP13,JP14	SHORT WIRE	TA-0.6	2	L=32MM P=12.5
41	JP15,JP16,JP18,JP19	SHORT WIRE	TA-0.6	4	L=32MM P=17.5
42	JP17	SHORT WIRE	TA-0.6	1	L=32MM P=15
43	JP20	SHORT WIRE	TA-0.6	1	L=32MM P=20


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
WN5
Drawing Number:
40003001SS
High Voltage
(primary)
Low Voltage
(secondary)
TEL1
(OPTEL)
TEL2
LINE
600
370
275
220

WN5 PCB Assy (40003001BT) (1/3)

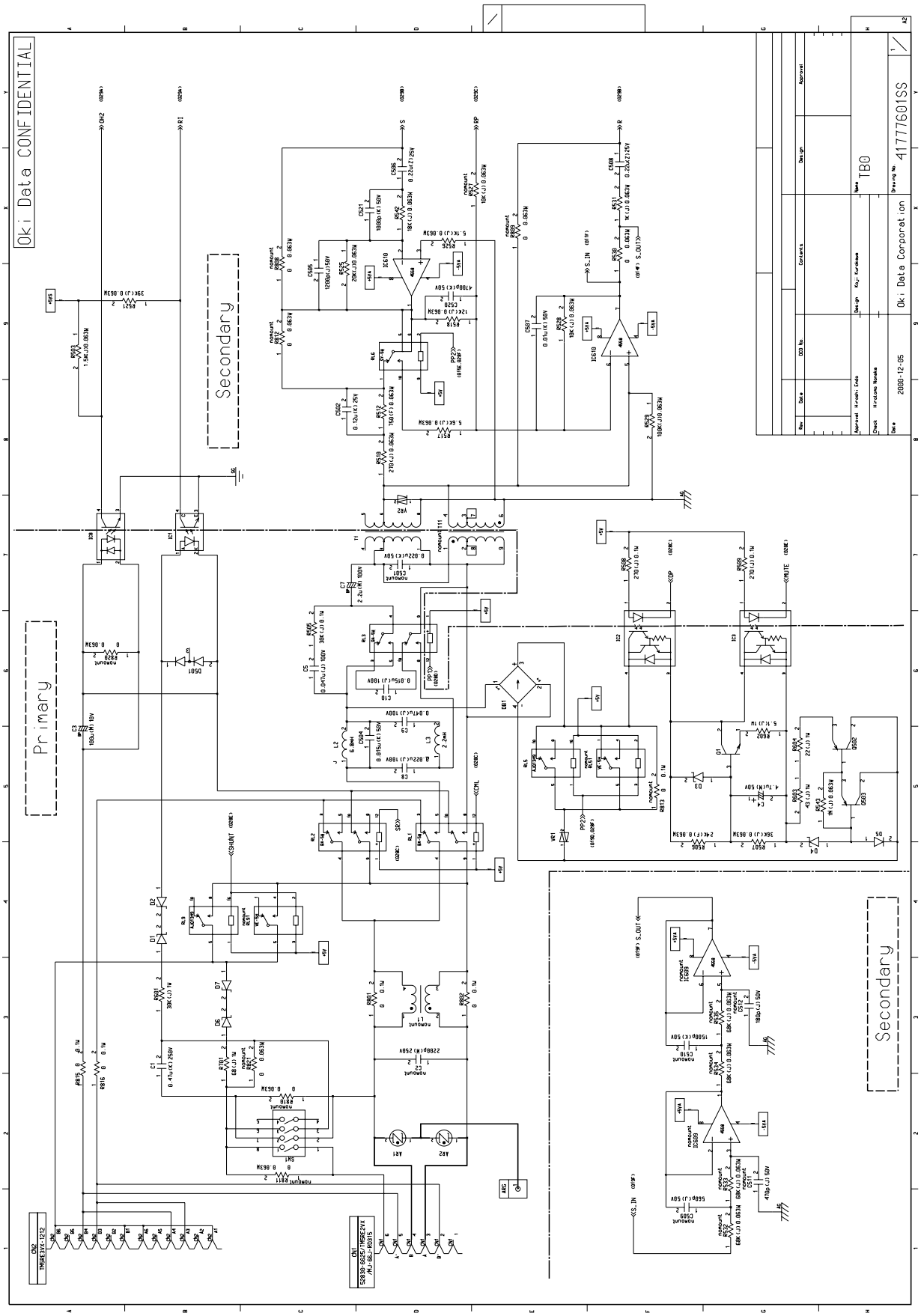
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	AR1,AR2	RA-501P-V6-Y-2 ARRESTER-P	5431001G0501	2	
2					
3	C1,C201	ECQ-E2474KF 250V CAP-Plast flm -	306A2221K5474	2	
4	C5	SME10VB-100BP-OA 10V CAP-Alum(CE) -	304A1122A1101	1	
5	C11	UVP2A2R2 100V CAP-Alum(CE) -P	3041203A2229	1	
6	C13	UVR1H2R2 50V CAP-Alum(CE) -P	3041003H1229	1	
7	C31	ECQB1473JF3 100V CAP-Plast flm -P	3062002J2473	1	
8	C515	CK2012R1H223K 50V CAP-Ceramic -C	303A6008K3223	1	
9	C503	GRM40B563K50 50V CAP-Ceramic -C	3036001K3563	1	
10	C603	GRM40B683K50 50V CAP-Ceramic -C	3036001K3683	1	
11	C703	GRM40B124K25 25V CAP-Ceramic -C	3036001K2124	1	
12	C803	GRM40B333K50 50V CAP-Ceramic -C	3036001K3333	1	
13					
14	CN1	TM5RE2V-66 Connector-Plug-	2233001P0001	1	
15	CN2	TM5RE3V-1212 Connector-Plug-	2233002P0001	1	
16	CN3	1-176837-4 Connector-PCB -	224A4335P0300	1	
17					
18	D3,D4	RD20E-B D-Zener -	613A1231L0252	2	4KH-31051-102
19	D11,D13,D14	RD12E-B2 D-Zener -	613A1231L0202B	3	4KH-31051-102
20	D501	SS100MA80VACP D-Signal -C	611A0000N0001	1	
21	D502	SS100MA80VSCP D-Signal -C	611A0000N0003	1	
22					
23	DB1	S1WBA60 D-Rectifying -	610A1027M0002D	1	
24					
25	IC1	PC123YS PHOTO-Coupler -	6520128M0001	1	

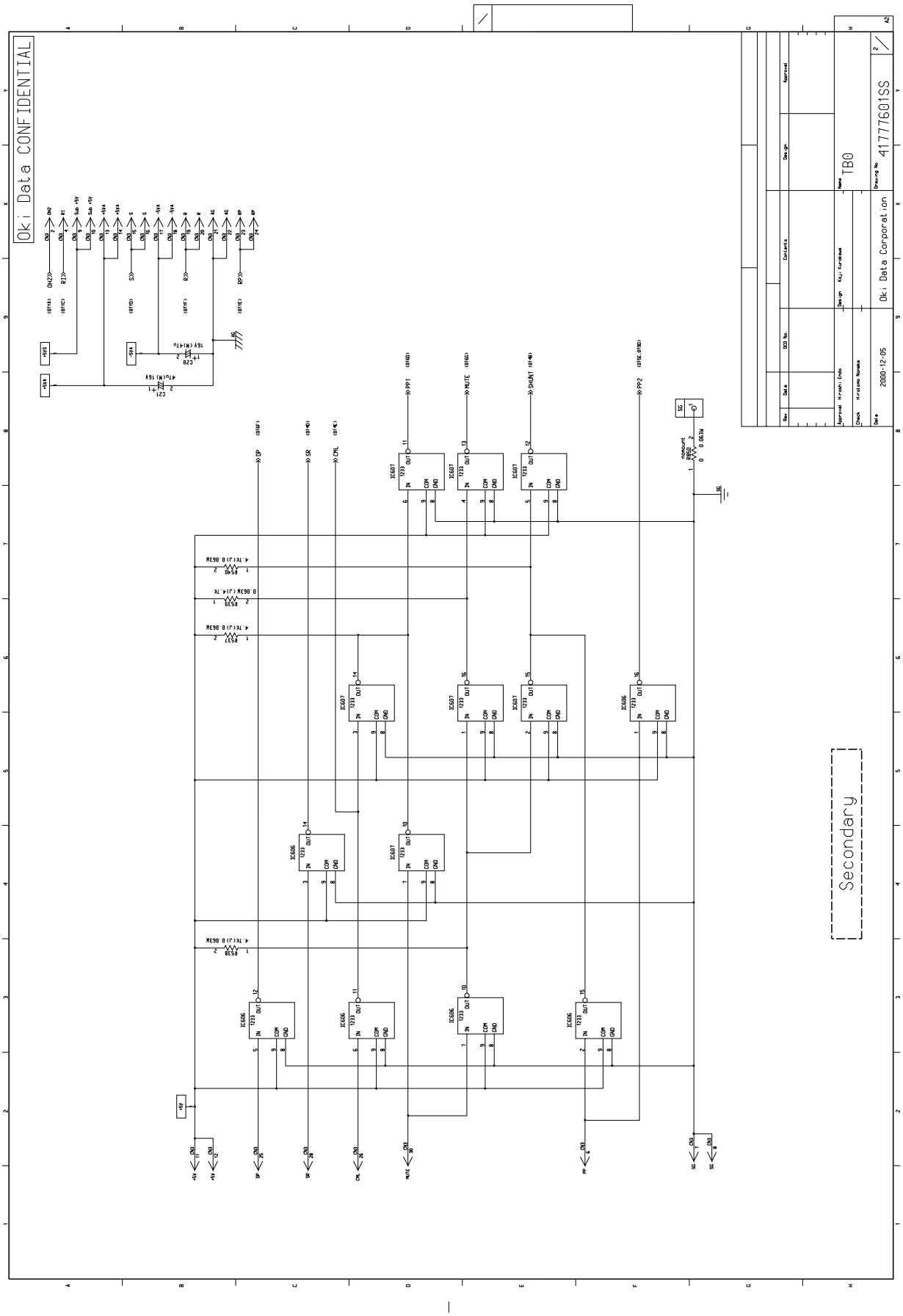
WN5 PCB Assy (40003001BT) (2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	IC2	PS2525-1 PHOTO-Coupler -	6520123M0001	1	
27	IC5,IC7	PS2532-1 PHOTO-Coupler -	6523123M0002	2	
28	IC10	2003P ARRAY-TR -	760A0403M0701	1	
29					
30	Q3	2SD1209K TR-NPN/L-FREQ -	603A1121M0010	1	4LH-31420
31	Q502	2SC2712-Y/G TR-NPN/H-FREQ -C	602A1025M0033	1	
32					
33	R2,R202,R402	MOS1-30KΩJU RES-MET OX -	324A3011J0303	3	
34	R302	MOS1-10KΩJU RES-MET OX -	3243010J0103	1	
35	R9	RNM1/4C2-10ΩF RES-MET RN -	323A4024F0100	1	
36	R209	RNM1/4C2-20ΩF RES-MET RN -	323A4024F0200	1	
37	R309	MOS1-39ΩJU RES-MET OX -	324A3011J0390	1	
38	R505,R507-R512,R547, R551-R560,R576,R578	2125JPW RES-MET RN -C	323A5003P0001	20	
39	R501	RM73B2A472J RES-MET RN -C	323A5003J0472	1	
40	R540,R630	RM73B2A203J RES-MET RN -C	323A5003J0203	2	
41	R541	RM73B2A363J RES-MET RN -C	323A5003J0363	1	
42	R515,R516	RM73B2A271J RES-MET RN -C	323A5003J0271	2	
43	R514,R519,R529	RM73B2A103J RES-MET RN -C	323A5003J0103	3	
44	R530	RM73B2A393J RES-MET RN -C	323A5003J0393	1	
45	R730	RM73B2A622J RES-MET RN -C	323A5003J0622	1	
46	R523,R623	RM73B2A102F RES-MET RN -C	323A5003F0102	2	
47	R590	RM73B2A303J RES-MET RN -C	323A5003J0303	1	
48	R536,R636	RM73B2A390J RES-MET RN -C	323A5003J0390	2	
49	R537,R737	RM73B2A682F RES-MET RN -C	323A5003F0682	2	

WN5 PCB Assy (40003001BT) (3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
50	R637	RM73B2A622F RES-MET RN -C	323A5003F0622	1	
51	R539,R639,R739	RM73B2A183F RES-MET RN -C	323A5003F0183	3	
52	R723	RM73B2A751F RES-MET RN -C	323A5003F0751	1	
53	R736	RM73B2A151F RES-MET RN -C	323A5003F0151	1	
54	R823	RM73B2A201F RES-MET RN -C	323A5003F0201	1	
55	R836	RM73B2A331F RES-MET RN -C	323A5003F0331	1	
56	R837	RM73B2A752F RES-MET RN -C	323A5003F0752	1	
57	R839	RM73B2A133F RES-MET RN -C	323A5003F0133	1	
58					
59	RL1,RL2	BA-5W-K Relay-General -	2601004P1000	2	
60	RL3	JV-5-K Relay-General -	2601005P1000	1	
61	RL6	SY-5W-K Relay-General -	2601006P1000	1	
62	RL7	ULR-T10910H Relay-Lead -	2611000P1000	1	
63					
64	T1	SR-422 TFORMER-LF -	3613000P0001	1	
65					
66	TB1	P-97 CONN PAR- -	230A6021P0002	1	
67					
68	S1	BS6-01 Switch-DIP -	206A1100P0600	1	
69	S3,S4	BS2-01 Switch-DIP -	206A1100P0200	2	
70					
71	CN15,CN25,CN35,CN45	IMSA9202B-1-06Z013GF Connector-PCB -	224A4082P0060	4	
72					
73	VR1	ERZV10D151 SEMICO-Vari -	6320229M0023	1	


Oki Data CONFIDENTIAL
Primary
Secondary
Secondary
TB0
Oki Data Corporation
41777601SS
2000-12-05


Oki Data CONFIDENTIAL
Secondary
Oki Data Corporation
TB0
4177601SS
2000-12-05

TB0 PCB Assy (41777601BT) (1/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	AR1,AR2	SRH412-501MFT ARRESTER- -P	5431004G0501	2	
2					
3	C1	ECQ-E2474KF 250V CAP-Plast flm -	306A2221K5474	1	
4	C3	SME10VB-100BP-0A 10V CAP-Alum(CE) -	304A1122A1101	1	
5	C4	TC04RSME50VB4R7MF50 CAP-Alum(CE) -P	3041010H1479	1	
6	C5,C9	ECQB1473JF3 100V CAP-Plast flm -P	3062002J2473	2	
7	C7	UVP2A2R2 100V CAP-Alum(CE) -P	3041203A2229	1	
8	C8	ECQB1223JF3 100V CAP-Plast flm -P	3062002J2223	1	
9	C10	ECQB1153JF3 100V CAP-Plast flm -P	3062002J2153	1	
10	C20,C21	UVX/SME-16V-47uF 16V CAP-Alum(CE) -P	3041003C1470	2	
11	C502	GRM40B124K25 25V CAP-Ceramic -C	3036001K2124	1	
12	C504	CK2012B1H153K 50V CAP-Ceramic -C	303A6008K3153	1	
13	C505	GRM40CH122J50PT 50V CAP-Ceramic -C	3033001C0122	1	
14	C506,C508	CK2012F1E224Z 25V CAP-Ceramic -C	303A6008Z2224	2	
15	C507	GRM/UMK/MCH/332B 50V CAP-Ceramic -C	3036003K0332	1	
16	C521	GRM/UMK/MCH/103B 50V CAP-Ceramic -C	3036003K0102	1	
17					
18	CN1	52830-6625/TM5RE2VX Connector-Plug -	2233003P0001	1	
19	CN2	TM5RE3VX-1212 Connector-Plug -	2233012P0001	1	
20	CN3	1-176837-4 Connector-PCB -	224A4335P0300	1	
21					
22	D1,D2	RD20E-B D-Zener -	613A1231L0252	2	
23	D3	RD6.2F-B D-Zener -	613A2232L0132	1	
24	D4	RD5.1E-B2 D-Zener -	613A1231L0112B	1	
25	D5	E-152 D-Signal -	611A0037L0011	1	

TB0 PCB Assy (41777601BT) (2/4)

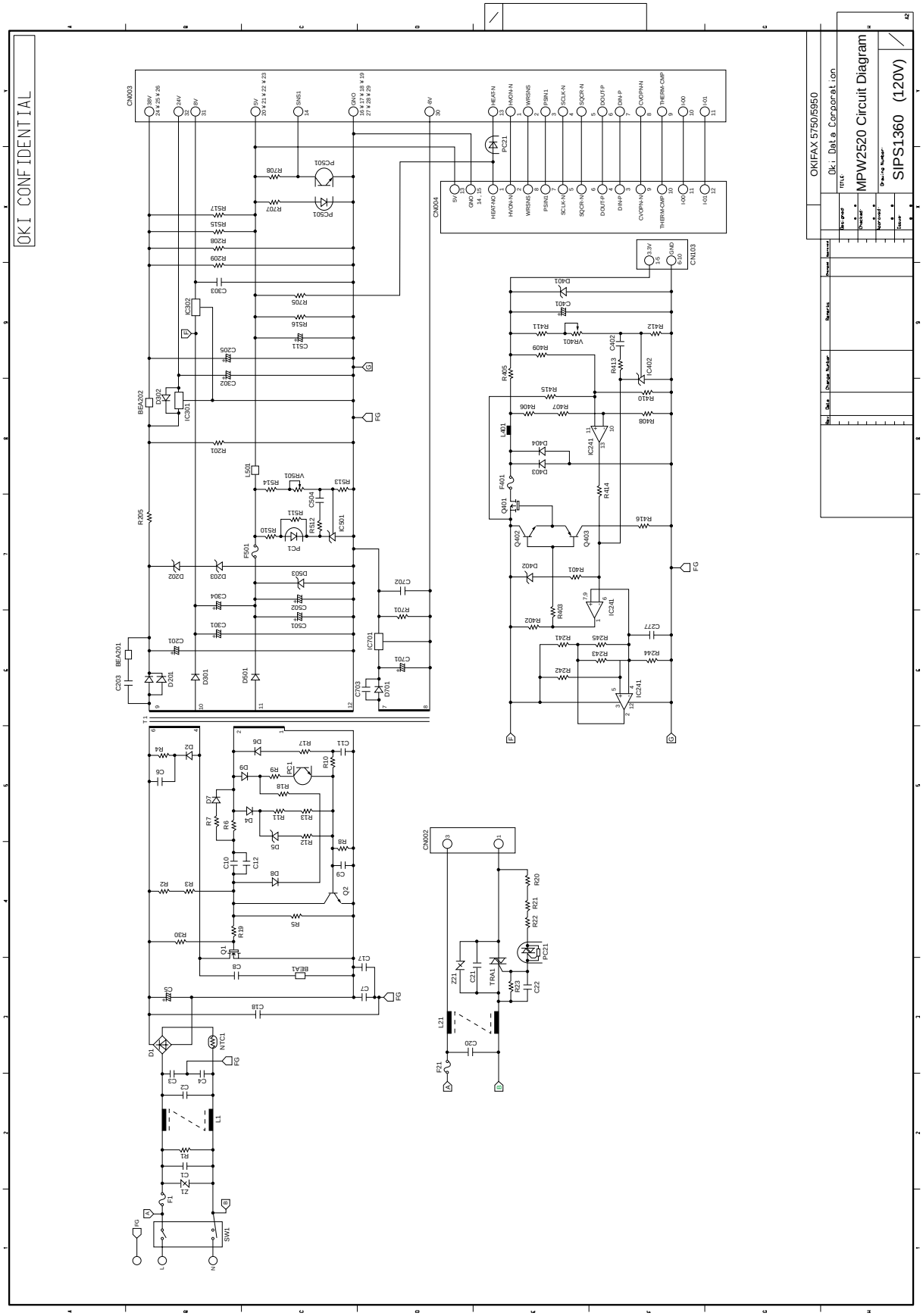
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	D6,D7	RD3.9E-B2 D-Zener -	613A1231L0082B	2	
27	D501	SS100MA80VSCP D-Signal -C	611A0000N0003	1	
28					
29	DB1	S1WBA60 D-Rectifying -	610A1027M0002D	1	
30					
31	IC1	TLP621 PHOTO-Coupler -	6520125M0003	1	
32	IC2,IC3	PS2532-1/TLP627 PHOTO-Coupler -	6523103M0003	2	
33	IC8	PS2525-1/TLP320 PHOTO-Coupler -	6520103M0002	1	
34	IC606,IC607	LB1233M/TD62003AF ARRAY-TR -B	7600003N0701	2	
35	IC610	NJM4558M Analog-BIPLIN -S	720A0028N0039	1	
36					
37	L2	LHL08TB-682J Coil-HF P	3531001J0682	1	
38	L3	LHL08TB-222J Coil-HF -B	3531001J0222	1	
39					
40	Q1	2SD1209K TR-NPN/L-FREQ -	603A1121M0010	1	
41	Q502	2SA1727/2SA1700-TL TR-PNP/H FREQ -C	6001103N0002	1	
42	Q503	2SA1384-0(TE12R,C) TR-NP/H FREQ -C	6001025N0002	1	
43					
44	R503	CR/RK73K/ERJ/MCRJ152 RES-MET RN -C	3235003J0152	1	
45	R505	RM73B2A303J RES-MET RN -C	323A5003J0303	1	
46	R506	CR/RK73K/ERJ/MCRJ243 RES-MET RN -C	3235003J0243	1	
47	R507	CR/RK73K/ERJ/MCRJ363 RES-MET RN -C	3235003J0363	1	
48	R508,R509	RM73B2A271J RES-MET RN -C	323A5003J0271	2	
49	R510	CR/RK73K/ERJ/MCRJ271 RES-MET RN -C	3235003J0271	1	
50	R512	CR/RK73K/ERJ/MCRJ751 RES-MET RN -C	3235003J0751	1	
51	R517	CR/RK73K/ERJ/MCRJ562 RES-MET RN -C	3235003J0562	1	

TB0 PCB Assy (41777601BT) (3/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R518	CR/RK73K/ERJ/MCRJ123 RES-MET RN -C	3235003J0123	1	
53	R521	CR/RK73K/ERJ/MCRJ393 RES-MET RN -C	3235003J0393	1	
54	R525	CR/RK73K/ERJ/MCRJ203 RES-MET RN -C	3235003J0203	1	
55	R526	CR/RK73K/ERJ/MCRJ512 RES-MET RN -C	3235003J0512	1	
56	R528	CR/RK73H/ERJ/MCRF912 RES-MET RN -C	3235003F0912	1	
57	R529	CR/RK73K/ERJ/MCRJ104 RESMET RN -C	3235003J0104	1	
58	R531	CR/RE73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	1	
59	R537-R540	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003K0472	4	
60	R542	CR/RK73K/ERJ/MCRJ183 RES-MET RN -C	3235003J0183	1	
61	R543	CR/RK73K/ERJ/MCRJ105 RES-MET RN -C	3235003J0105	1	
62	R601	MCR100JZH J303 RES-MET RN -C	3235040J0303	1	
63	R602	MCR100JZH J5R1 RES-NET RN -C	3235040J0519	1	
64	R603	MCR100JZH J430 RES-MET RN -C	3235040J0430	1	
65	R604	MCR100JZH J220 RES-MET RN -C	3235040J0220	1	
66	R701	MCR100JZH J680 RES-MET RN -C	3235040J0680	1	
67	R801,R802,R815,R816	2125JPW RES-MET RN -C	323A5003P0001	4	
68	R530	CR/RK73Z/ERJ/MCRJ-0V RES-Zero ohm -C	3255003P0001	1	
69					
70	RL1-RL3	BA-5W-K/ATXD209/EC2 Relay-General -	2601003P1000	3	
71	RL5,RL9	OR-AJQ1349/VE-5HS-K	41824301	2	
72	RL6	AHY109/SY-5W-K Relay-General -	2601103P1000	1	
73					
74	SW1	BS2-01 Switch-DIP -	206A1100P0200	1	
75					
76	T1	SR-422 TFORMER-LF -	3613000P0001	1	
77					

TB0 PCB Assy (41777601BT) (4/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
78	VR1	ERZV10D680 SEMICO0Vari -	6320229M0025	1	
79	VR2	ERZV07D220 SEMICO0Vari -	6320229M0011	1	
80					
81	S1	SHORT WIRE	TA-0.6	1	L=55mm, P=7.54mm


OKI CONFIDENTIAL
OKIFAX 5750/5950
Oki Data Corporation
MPW2520 Circuit Diagram
SIPS1360 (120V)

MPW2520 (120V) (JEPS-364) (1/5)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
1	D1	DIODE	D3SBA60		1	SHINDENGEN ELECTRIC MFG.
2	D302	DIODE	ERA15-06		1	FUJI ELECTRIC CO.,LTD.
3	D301,D501	DIODE	YG811S06R		2	FUJI ELECTRIC CO., LTD.
4	D201	DIODE	YG902C2R		1	FUJI ELECTRIC CO., LTD.
5	D4,D6-D9	DIODE	1SS133		5	ROHM CO.,LTD.
6	D701	DIODE	ERB44-06		1	FUJI ELECTRIC CO., LTD.
7	D2	DIODE	ERA22-06		1	FUJI ELECTRIC CO., LTD.
8	D403,D404	DIODE	ERA83-006		2	FUJI ELECTRIC CO., LTD.
9	D202,D203	ZENER DIODE	HZ-24P		2	HITACHI LTD.
10	D402	ZENER DIODE	HZS4		1	HITACHI LTD.
11	D5	ZENER DIODE	HZS9		1	HITACHI LTD.
12	D401,D503	ZENER DIODE	HZ6		2	HITACHI LTD.
13						
14	TRA1	TRIODE AC SEMICONDUCTOR SWITCH	SM121Z47		1	TOSHIBA CORP. INT'L OPERATIONS-ELEC.
15						
16	Q401	FET	2SJ303		1	NEC CORP.
17	Q1	FET	2SK2972		1	TOSHIBA CORP. INT'L OPERATIONS-ELEC.
18	Q403	TRANSISTOR	2SA933S		1	ROHM CO., LTD.
19	Q2,Q402	TRANSISTOR	2SC1741AS		2	ROHM CO., LTD.
20						
21	IC241	INTEGRATED CIRCUIT NKM2901N			1	NEW JAPAN RADIO CO., LTD.
22	IC302,IC701	INTEGRATED CIRCUIT TA7808S			2	TOSHIBA CORP. INT'L OPERATIONS-ELEC.
23	IC301	INTEGRATED CIRCUIT TA78M24S			1	TOSHIBA CORP. INT'L OPERATIONS-ELEC.
24	IC402,IC501	INTEGRATED CIRCUIT TA76431S			2	TOSHIBA CORP. INT'L OPERATIONS-ELEC.
25						
26	PC1	OPTICAL ISOLATER PC817			1	SHARP CORP.
27	PC21	OPTICAL ISOLATER S21ME6			1	SHARP CORP.
28	PC501	PHOTO INTERRUPTER PRI-574			1	ROHM CO., LTD.

MPW2520 (120V) (JEPS-364) (2/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
29	Z1	TRANSIENT VOLTAGE SURGE SUPPESSOR ENC241		1	FUJI ELECTRIC CO., LTD
30	Z21	TRANSIENT VOLTAGE SURGE SUPPESSOR ENC471		1	FUJI ELECTRIC CO., LTD.
31					
32	NTC1	NTC THERMISTOR NTH1D8R0		1	MURATA MFG. CO., LTD.
33					
34	R19,R21,R22	RESISTOR 1/4W 10Ω		3	
35	R414	RESISTOR 1/4W 100Ω		1	
36	R7	RESISTOR 1/4W 180Ω		1	
37	R416,R510,R516,R705	RESISTOR 1/4W 220Ω		4	
38	R6	RESISTOR 1/4W 330Ω		1	
39	R17,R701	RESISTOR 1/4W 680Ω		2	
40	R9	RESISTOR 1/4W 820Ω		1	
41	R402,R403,R511,R707	RESISTOR 1/4W 1KΩ		4	
42	R401	RESISTOR 1/4W 1.2KΩ		1	
43	R13	RESISTOR 1/4W 1.8KΩ		1	
44	R18	RESISTOR 1/4W 2.2KΩ		1	
45	R412	RESISTOR 1/4W 2.7KΩ		1	
46	R512	RESISTOR 1/4W 15KΩ		1	
47	R411	RESISTOR 1/4W 620Ω		1	
48	R10	RESISTOR 1/4W 6.8KΩ		1	
49	R515,R517	RESISTOR 1/4W 7.5KΩ		2	
50	R201,R208,R209,R413	RESISTOR 1/4W 10KΩ		4	
51	R12	RESISTOR 1/4W 13KΩ		1	
52	R8	RESISTOR 1/4W 33KΩ		1	
53	R708	RESISTOR 1/4W 47KΩ		1	
54	R415	RESISTOR 1/4W 330KΩ		1	
55	R1	RESISTOR 1/4W 1MΩ		1	
56	R406	RESISTOR 1/4W 82Ω		1	
57	R407,R409	RESISTOR 1/4W 100Ω		2	
58	R408,R410	RESISTOR 1/4W 330Ω		2	
59	R513,R514	RESISTOR 1/4W 3.9KΩ		2	
60	R11	RESISTOR 1/4W 8.2KΩ		1	
61	R241	RESISTOR 1/4W 12KΩ		1	
62	R5	RESISTOR 1/4W 20KΩ		1	
63	R245	RESISTOR 1/4W 27KΩ		1	
64	R242	RESISTOR 1/4W 47KΩ		1	
65	R244	RESISTOR 1/4W 82KΩ		1	
66	R243	RESISTOR 1/4W 100KΩ		1	

MPW2520 (120V) (JEPS-364) (3/5)

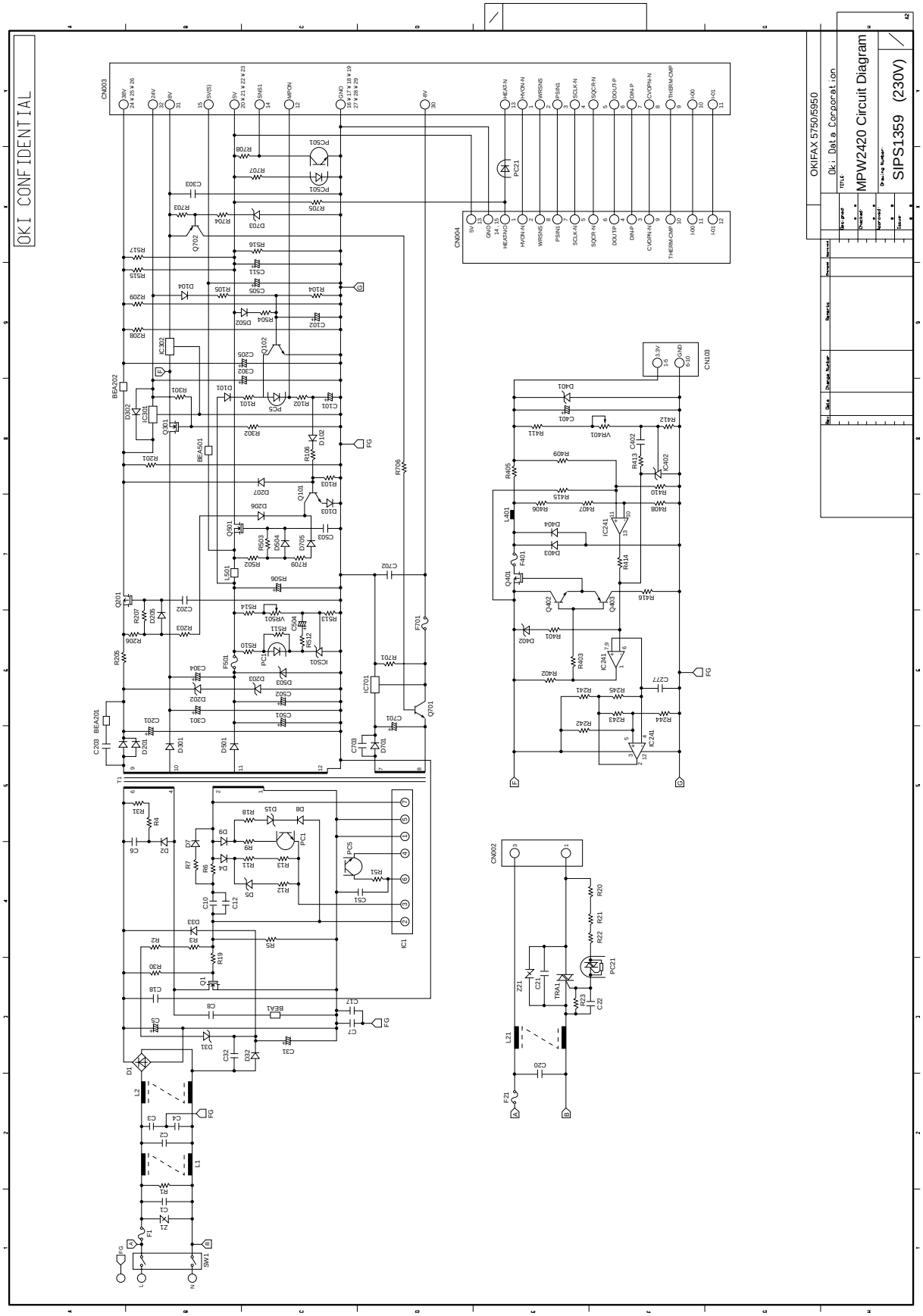
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
67	R2,R3	RESISTOR 1/4W 180KΩ		2	
68	R405	RESISTOR 2W 0.1Ω		1	
69	R20	RESISTOR 1/6W 10Ω		1	
70	R23	RESISTOR 1/6W 150Ω		1	
71	R205	RESISTOR 2W 0.1Ω		1	
72	R4	RESISTOR 2W 47KΩ		1	
73	VR401	RESISTOR 1/10W 500Ω		1	
74	VR501	RESISTOR 1/10W 1KΩ		1	
75					
76	C11	CERAMIC CAPACITOR 500V 220pF		1	MURATA MFG. CO., LTD.
77	C203	CERAMIC CAPACITOR 500V 1000pF		1	MURATA MFG. CO., LTD.
78	C22,C303,C402,C504, C702	CERAMIC CAPACITOR 50V 0.1μF		5	MURATA MFG. CO., LTD.
79	C21	CERAMIC CAPACITOR KH 1000pF		1	MURATA MFG. CO., LTD.
80	C7	CERAMIC CAPACITOR KH 3300μF		1	MURATA MFG. CO., LTD.
81	C8	CERAMIC CAPACITOR 1KV 220pF		1	MURATA MFG.CO., LTD.
82	C6	CERAMIC CAPACITOR 1KV 1000pF		1	MURATA MFG. CO., LTD.
83	C18	CERAMIC CAPACITOR KX 3300pF		1	MURATA MFG. CO., LTD.
84	C1	FILM CAPACITOR AC250V 0.1μF (RE)		1	OKAYA ELECTRIC CO., LTD
85	C277	FILM CAPACITOR 50V 470pF		1	RUBYCON CO., LTD
86	C9	FILM CAPACITOR 50V 4700pF		1	RUBYCON CO., LTD
87	C12	FILM CAPACITOR 50V 0.01μF		1	RUBYCON CO., LTD
88	C501,C502	ELECTROLYTIC CAPACITOR 10V 1200μF(LXV)		2	NIPPON CHEMI-CON LTD.
89	C302	ELECTROLYTIC CAPACITOR 35V 82μF(LXV)		2	NIPPON CHEMI-CON LTD.
90	C701	ELECTROLYTIC CAPACITOR 35V 120μF(LXV)		1	NIPPON CHEMI-CON LTD.
91	C301	ELECTROLYTIC CAPACITOR 35V 330mF(LXV)		1	NIPPON CHEMI-CON LTD
92	C205	ELECTROLYTIC CAPACITOR 50V 180μF(LXV)		1	NIPPON CHEMI-CON LTD.
93	C401	ELECTROLYTIC CAPACITOR 16V 470μF(LXV)		1	NIPPON CHEMI-CON LTD.

MPW2520 (120V) (JEPS-364) (4/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
94	C5	ELECTROLYTIC CAPACITOR 200V 560µF(KMM)		1	NIPPON CHEMI-CON LTD.
95	C201	ELECTROLYTIC CAPACITOR 50V 560µF(LXV)		1	NIPPON CHEMI-CON LTD.
96					
97	L21	INDUCTOR PLA10A9012R0		1	MURATA MFG. CO., LTD.
98	L401	INDUCTOR 18931C		1	TOKYO PARTS CO., LTD.
99	L1	INDUCTOR ELF18M012A		1	MATSUSHITA ELECTRIC IND. CO
100	L501	INDUCTOR DP08005		1	TOHSEI IND. CO., LTD
101					
102	T1	TRANSFORMER 2Q039		1	MURATA MFG. CO., LTD.
103					
104	BEA1	FERRITE BEADS BL02RN1		1	MURATA MFG. CO., LTD.
105	BEA202	FERRITE BEADS BL01RN1		1	MURATA MFG. CO., LTD.
106					
107	F21	FUSE AC125V 8.0A(237)		1	LITTELFUSE INC.
108	F1,F501	FUSE AC125V 4.0A(19396)		2	WICKMANN-WERKE GMBH.
109	F401	FUSE 60V 4.0A(491)		1	LITTELFUSE INC.
110	CN003	CONNECTOR 00-8332-232-990-012		1	KYOCERA ELCO CORPORATION
111	CN103	CONNECTOR B10B-EH-A		1	JAPAN SOLDERLESS TERMIMAL MFG. CO.,
112	CN002	CONNECTOR B2P3-VH		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
113	CN004	CONNECTOR 15JQ-ST		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
114		FG BRACKET		3	KYOSHIN KOGYO CO., LTD.
115					
116	BEA201	WIRE 5mm		1	
117	F701	WIRE 12.5mm		1	
118					
119		PRINTED WIRING BOARD		1	
120					
121	SW1	AC SWITCH SJ-W2P4A-03BB2		1	ECHO ELECTRIC CO., LTD.
122		ATTACHMENT PLUG AP-300-2-B-1		1	YAMATE ELECTRIC CO., LTD.

MPW2520 (120V) (JEPS-364) (5/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
123		HEAT SINK A		2	
124		HEAT SINK B		1	
125		HEAT SINK C		1	
126					
127	C2,C3,C4,C10,C17,C20, C304,C703	OPEN			
128	R30	OPEN			


OKI CONFIDENTIAL
OKIFAX 5750/5950
Oki Data Corporation
MPW2420 Circuit Diagram
SIPS1359 (230V)

MPW2420 (230V) (JEPS-365) (1/5)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
1	D1	DIODE	D3SBA6		1	SHINDENGEN ELECTRIC MFG. CO.,
2	D32,D33,D302	DIODE	ERA15-06		3	FUJI ELECTRIC CO., LTD.
3	D301, 501	DIODE	YG811S06R		2	FUJI ELECTRIC CO., LTD.
4	D201	DIODE	YG902C2R		1	FUJI ELECTRIC CO., LTD.
5	D4,D7-D9, D101-D104, D205, 206,D502, 504, D705	DIODE	1SS133		13	ROHM CO., LTD.
6	D701	DIODE	ERB44-06		1	FUJI ELECTRIC CO., LTD.
7	D2	DIODE	ERA22-10		1	FUJI ELECTRIC CO., LTD.
8	D403, 404	DIODE	ERA83-006		2	FUJI ELECTRIC CO., LTD.
9	D703	DIODE	MTZJ3.0		1	ROHM CO., LTD.
10	D202,D203	DIODE	HZ-24P		2	HITACHI LTD.
11	D31	DIODE	RD120E		1	NEC CORP.
12	D15,D402	DIODE	HZS4		2	HITACHI LTD.
13	D5	DIODE	HZS7		1	HITACHI LTD.
14	D401,D503	DIODE	HZ6		2	HITACHI LTD.
15						
16	TRA1	TRIODE AC SEMICONDUCTOR SWITCH	SM12JZ47		1	TOSHIBA CORP.INT'L OPERATIONS-ELECT.
17						
18	Q201,Q401	FET	2SJ303		2	NEC CORP.
19	Q501	FET	2SJ334		1	TOSHIBA CORP.INT'L OPERATIONS-ELECT.
20	Q1	FET	2SK2717		1	TOSHIBA CORP.INT'L OPERATIONS-ELECT.
21	Q301	FET	2SK2232		1	TOSHIBA CORP.INT'L OPERATIONS-ELECT.
22	Q403,Q702	TRANSISTOR	2SA933S		2	ROHM CO., LTD.
23	Q101,Q102	TRANSISTOR	2SC1740S		2	ROHM CO., LTD.
24	Q402	TRANSISTOR	2SC1742AS		1	ROHM CO., LTD
25	Q701	TRANSISTOR	2SD1858		1	ROHM CO., LTD.
26						
27	IC241	INTEGRATED CIRCUIT	NJM2901N		1	NEW JAPAN RADIO CO., LTD.
28	IC302, 701	INTEGRATED CIRCUIT	TA7808S		2	TOSHIBA CORP. INT'L OPERATIONS-ELECT.
29	IC301	INTEGRATED CIRCUIT	TA78M24S		1	TOSHIBA CORP. INT'L OPERATIONS-ELECT.

MPW2420 (230V) (JEPS-365) (2/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
30	IC402,IC501	INTEGRATED CIRCUIT TA76431S		2	TOSHIBA CORP. INT'L OPERATIONS-ELECT.
31	IC1	HYBRID INTEGRATED CIRCUIT H8D2877		1	
32					
33	PC1,PC5	OPTICAL ISOLATER PC123		2	SHARP CORP.
34	PC21	OPTICAL ISOLATER S21ME6		1	SHARP CORP.
35	PC501	OPTICAL ISOLATER RP1-574		1	ROHM CO., LTD
36					
37	Z1,Z2	TRANSIENT VOLTAGE SURGE SUPPRESSOR ENC471		2	FUJI ELECTRIC CO., LTD.
38					
39	R19,R21,R22	RESISTOR 1/4W 10Ω		3	
40	R414,R510,R709	RESISTOR 1/4W 100Ω		3	
41	R7	RESISTOR 1/4W 180Ω		1	
42	R416,R516,R705	RESISTOR 1/4W 220Ω		3	
43	R6	RESISTOR 1/4W 270Ω		1	
44	R411	RESISTOR 1/4W 620Ω		1	
45	R701	RESISTOR 1/4W 680Ω		1	
46	R9,R402,R403, R502,R511,R707	RESISTOR 1/4W 1KΩ		6	
47	R401	RESISTOR 1/4W 1.2KΩ		1	
48	R504	RESISTOR 1/4W 1.5KΩ		1	
49	R102	RESISTOR 1/4W 1.8KΩ		1	
50	R18,R706	RESISTOR 1/4W 2.2KΩ		2	
51	R412	RESISTOR 1/4W 2.7KΩ		1	
52	R103,R104	RESISTOR 1/4W 3.3KΩ		2	
53	R101,R206	RESISTOR 1/4W 4.7KΩ		2	
54	R203	RESISTOR 1/4W 6.8KΩ		1	
55	R301,R413,R512, R515,R517,R703,R704	RESISTOR 1/4W 10KΩ		7	
56	R201,R208,R209	RESISTOR 1/4W 15KΩ		3	
57	R105	RESISTOR 1/4W 18KΩ		1	
58	R12	RESISTOR 1/4W 27KΩ		1	
59	R302	RESISTOR 1/4W 33KΩ		1	
60	R708	RESISTOR 1/4W 47KΩ		1	
61	R51	RESISTOR 1/4W 68KΩ		1	
62	R503	RESISTOR 1/4W 100KΩ		1	
63	R415	RESISTOR 1/4W 330KΩ		1	
64	R207	RESISTOR 1/4W 1MΩ		1	
65	R1	RESISTOR 1/2W 4.7MΩ		1	

MPW2420 (230V) (JEPS-365) (3/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
66	R406	RESISTOR 1/4W 82Ω		1	
67	R407,R409	RESISTOR 1/4W 100Ω		2	
68	R13	RESISTOR 1/4W 180Ω		1	
69	R408,R410	RESISTOR 1/4W 330Ω		2	
70	R513,R514	RESISTOR 1/4W 3.9KΩ		2	
71	R11	RESISTOR 1/4W 8.2KΩ		1	
72	R241	RESISTOR 1/4W 12KΩ		1	
73	R5	RESISTOR 1/4W 22KΩ		1	
74	R245	RESISTOR 1/4W 27KΩ		1	
75	R242	RESISTOR 1/4W 47KΩ		1	
76	R244	RESISTOR 1/4W 82KΩ		1	
77	R243	RESISTOR 1/4W 100KΩ		1	
78	R2,R3	RESISTOR 1/4W 390KΩ		2	
79	R20	RESISTOR 1/6W 10Ω		1	
80	R23	RESISTOR 1/6W 150Ω		1	
81	R405	RESISTOR 2W 0.1Ω		1	
82	R4,R31	RESISTOR 1W 150KΩ		2	
83	VR401	RESISTOR 1/10W 500Ω		1	
84	VR501	RESISTOR 1/10W 1KΩ		1	
85					
86	C51	CERAMIC CAPACITOR 50V 100pF		1	MURATA MFG. CO., LTD.
87	C203	CERAMIC CAPACITOR 500V 1000pF		1	MURATA MFG. CO., LTD.
88	C22,C202,C303,C402, C503,C702	CERAMIC CAPACITOR 50V 0.1μF		6	MURATA MFG. CO., LTD.
89	C3,C4,C21,C32	CERAMIC CAPACITOR KH 1000pF		4	MURATA MFG. CO., LTD.
90	C7	CERAMIC CAPACITOR KH 3000pF		1	MURATA MFG. CO., LTD.
91	C8	CERAMIC CAPACITOR 2KV 47pF		1	MURATA MFG. CO., LTD.
92	C6	CERAMIC CAPACITOR 1KV 330pF		1	MURATA MFG.CO., LTD.
93	C18	CERAMIC CAPACITOR KX 3300pF		1	MURATA MFG.CO., LTD.
94	C1,C20	CERAMIC CAPACITOR AC250V 0.1μF(RE)		2	OKAYA ELECTRIC CO., LTD.
95	C277	FILM CAPACITOR 50V 470pF		1	RUBYCON CO., LTD.
96	C12	FILM CAPACITOR 50V 5600pF		1	RUBYCON CO., LTD.
97	C10	FILM CAPACITOR 50V 0.01μF		1	RUBYCON CO., LTD.

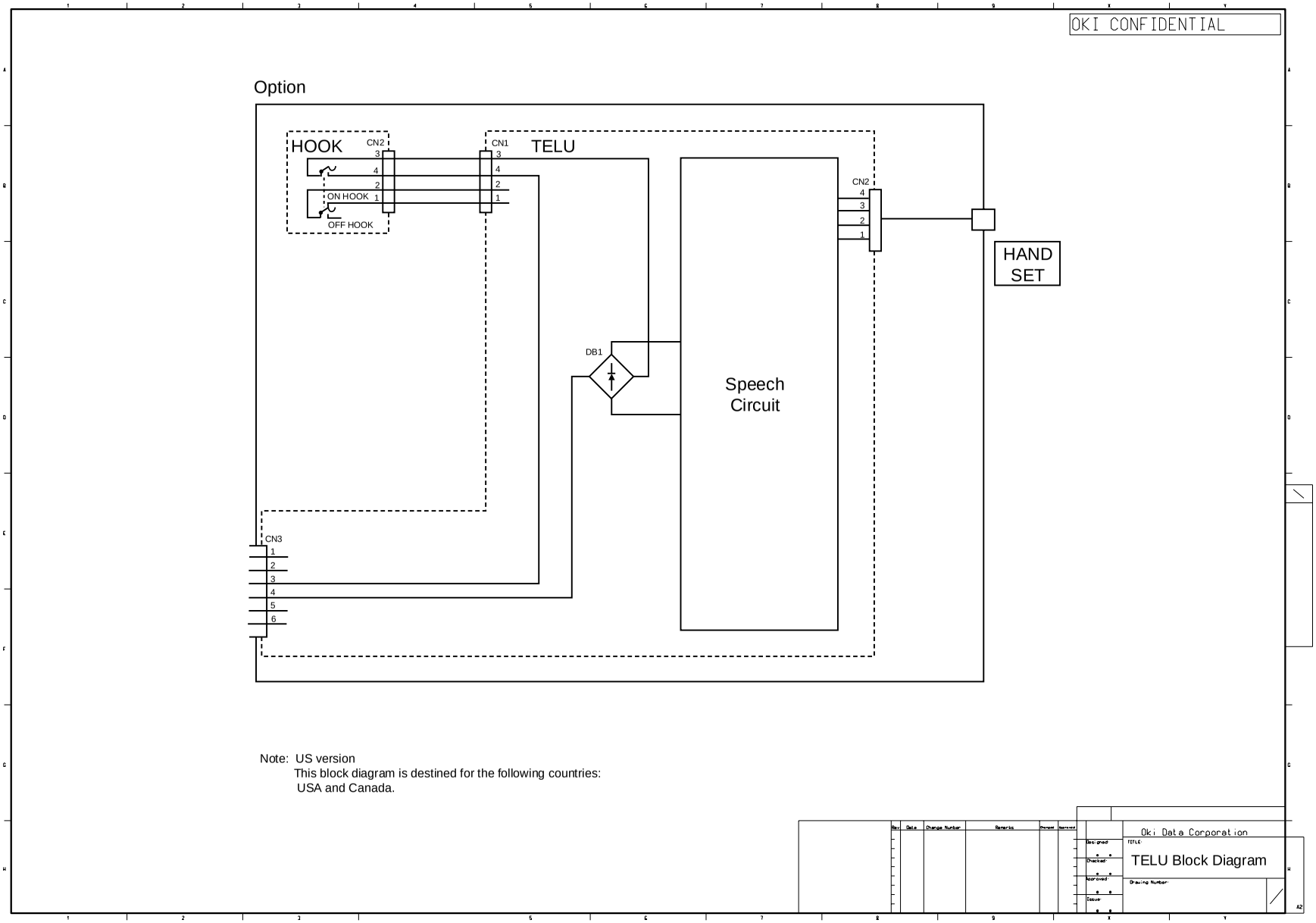
MPW2420 (230V) (JEPS-365) (4/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
98	C101,C506	ELECTROLYTIC CAPACITOR 50V 10µF(LXA)		2	NIPPON CHEMI-CON LTD.
99	C504	ELECTROLYTIC CAPACITOR 50V 1µF(LXA)		1	NIPPON CHEMI-CON LTD.
100	C501,C502	ELECTROLYTIC CAPACITOR 10V 1200µF(LXV)		2	NIPPON CHEMI-CON LTD.
101	C102	ELECTROLYTIC CAPACITOR 35V 120µF(LXV)		1	NIPPON CHEMI-CON LTD.
102	C302,C304,C505,C511	ELECTROLYTIC CAPACITOR 35V 82µF(LXV)		4	NIPPON CHEMI-CON LTD.
103	C301	ELECTROLYTIC CAPACITOR 35V 330µF(LXV)		1	NIPPON CHEMI-CON LTD.
104	C205	ELECTROLYTIC CAPACITOR 63V 120µF(LXV)		1	NIPPON CHEMI-CON LTD.
105	C401	ELECTROLYTIC CAPACITOR 16V 470µF(LXV)		1	NIPPON CHEMI-CON LTD.
106	C31	ELECTROLYTIC CAPACITOR 400V 1µF(KMG)		1	NIPPON CHEMI-CON LTD.
107	C5	ELECTROLYTIC CAPACITOR 400V 180µF(KMM)		1	NIPPON CHEMI-CON LTD.
108	C201	ELECTROLYTIC CAPACITOR 63V 470µF(LXV)		1	NIPPON CHEMI-CON LTD.
109	C701	ELECTROLYTIC CAPACITOR 35V 220µF(LXV)		1	NIPPON CHEMI-CON LTD.
110					
111					
112	L21	INDUCTOR PLA10A1821R5		1	MURATA MFG. CO., LTD.
113	L401	INDUCTOR 18931C		1	TOKYP PARTS CO., IND. LTD.
114	L1	INDUCTOR ELF18N008A		1	MATSUSHITA ELECTRIC IND. CO.,
115	L501	INDUCTOR DP08005		1	TOHSEI IND.CO., LTD
116	L2	INDUCTOR CN28-207-060		1	TOKIN CORP.
117					
118	T1	TRANSFORMER 2Q038		1	MURATA MFG. CO., LTD.
119					
120	BEA1,BEA502	FERRITE BEADS BL02RN1-R62		2	MURATA MFG. CO., LTD.
121	BEA202	FERRITE BEADS BL01RN1-A63		1	MURATA MFG. CO., LTD.
122					
123	F1	FUSE AC250V T2.5AH(215)		1	LITTELFUSE INC.
124	F21	FUSE AC250V T6.3AH(215)		1	LITTELFUSE INC.

MPW2420 (230V) (JEPS-365) (5/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
125	F501	FUSE AC125V 4.0A(19396)		1	WICKMANN-WERKE GMBH.
126	F401	FUSE 60V 4.0A(491)		1	LITTELFUSE INC.
127	F701	FUSE 60V 0.8A(491)		1	LITTELFUSE INC.
128					
129	CN003	CONNECTOR 00-8332-232-990-012		1	KYOSERA ECHO CORP.
130	CN103	CONNECTOR B10B-EH-A		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
131	CN002	CONNECTOR B2P3-VH		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
132	CN004	CONNECTOR 15JQ-ST		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
133		FG BRACKET		3	KYOSHIN KOGYO CO., LTD.
134	CN106	CONNECTOR B12PS-TB-2 or MB12P-90		1	JAPAN SOLDERLESS TERMINAL MFG. CO.,
135					
136	BEA201,R106,R205	WIRE 5mm		3	
137					
138		PRINTED WIRING BOARD		1	
139					
140	SW1	AC SWITCH SJ-W2P4A-03BB2		1	ECHO ELECTRIC CO., LTD.
141		ATTACHMENT PLUG AP-300-2-B-1		1	YAMATE ELECTRIC CO., LTD.
142		HEAT SINK A		2	
143		HEAT SINK B		1	
144		HEAT SINK C		2	
145					
146	C2,C17,C703,CN105, R30,D207	OPEN		6	

OKI CONFIDENTIAL



Note: US version
This block diagram is destined for the following countries:
USA and Canada.

Rev.	Date	Change Number	Remarks	Drawn	Approved

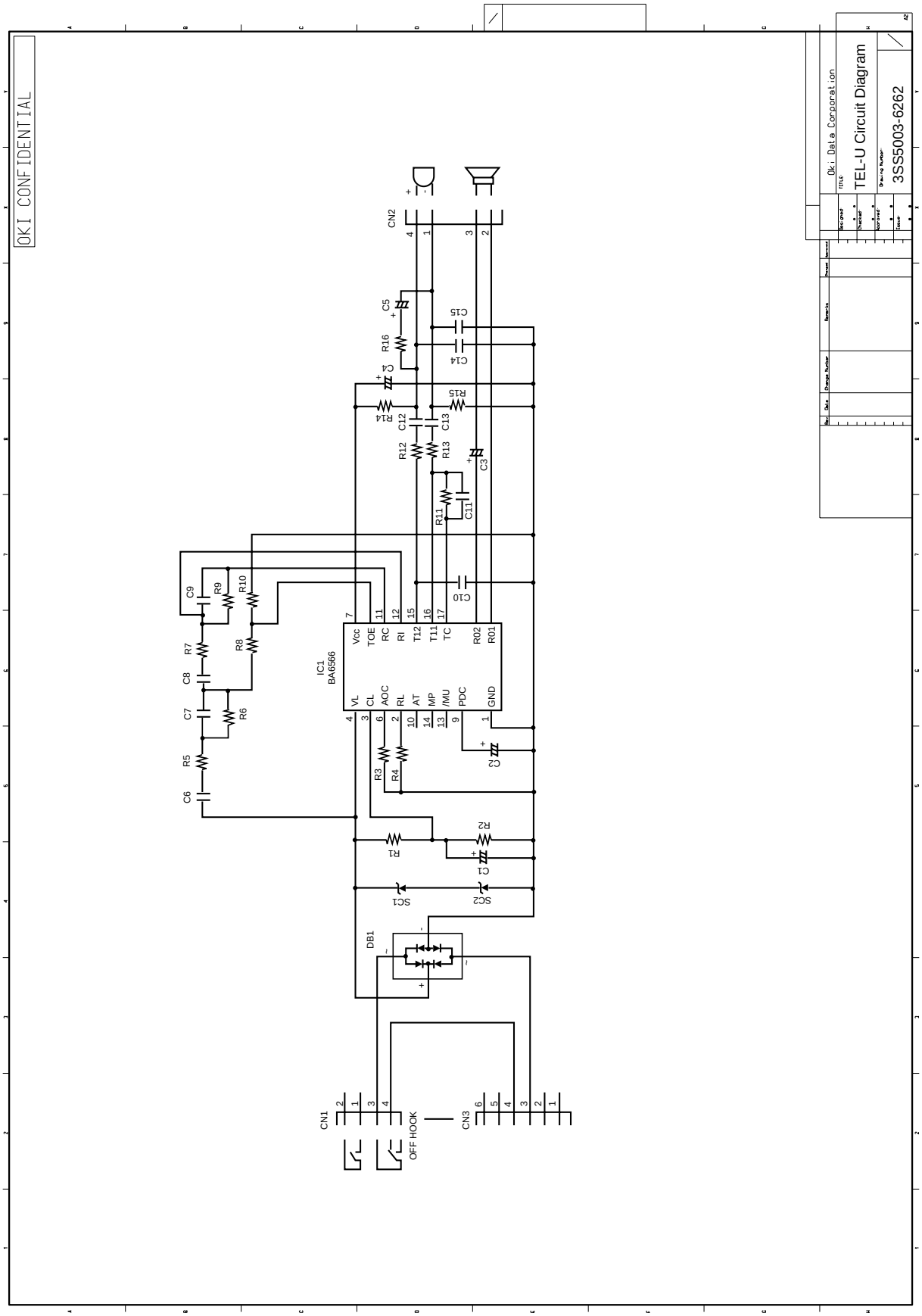
Designed:
Checked:
Approved:
Issued:

Oki Data Corporation

TITLE:
TELU Block Diagram

Drawing Number:

A2

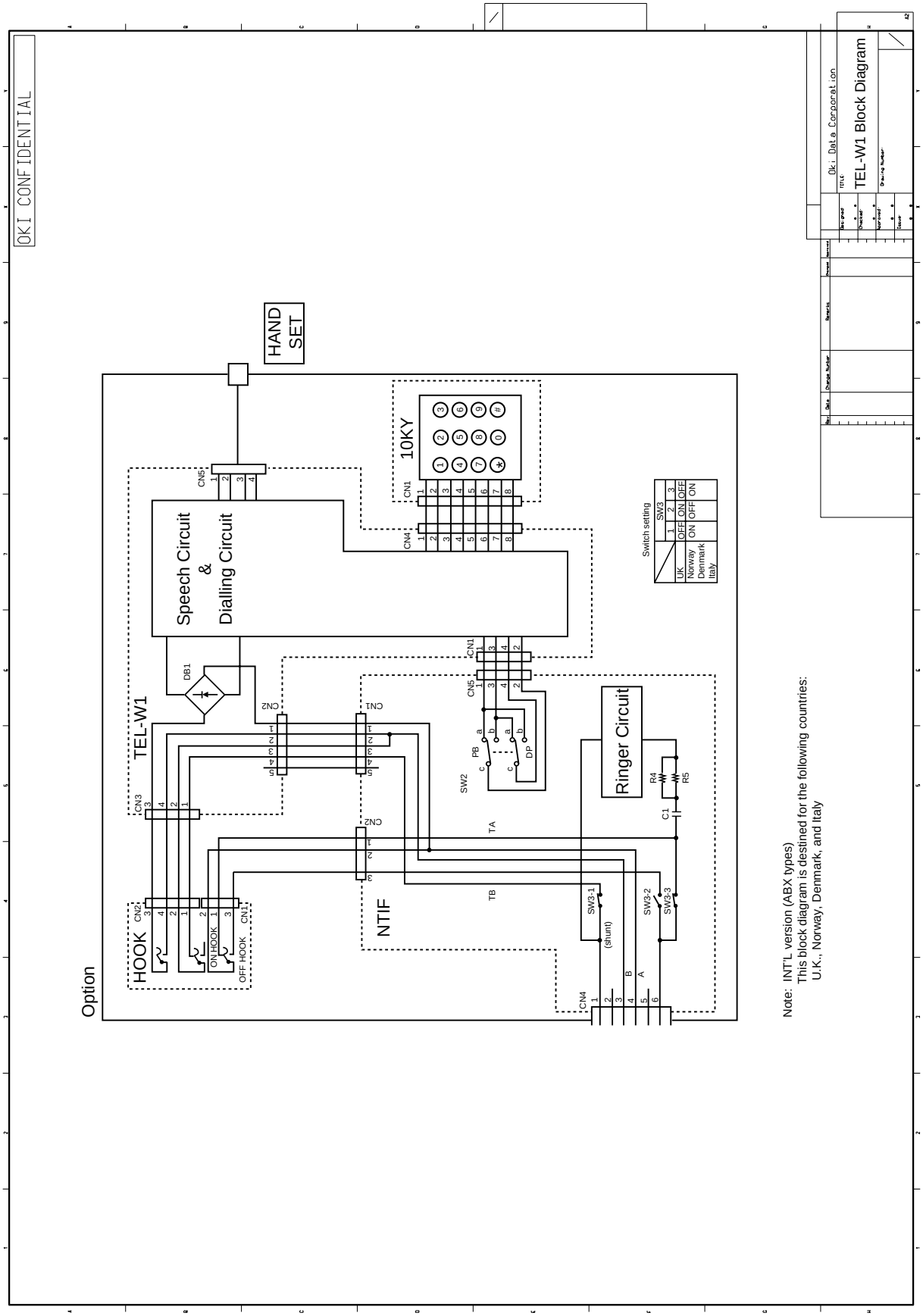

OKI CONFIDENTIAL
Oki Data Corporation
TEL-U Circuit Diagram
3SS5003-6262
IC1
BA6566
Vcc
TOE
RC
RI
T12
T11
TC
R02
R01
VL
CL
AOC
RL
AT
MP
/MU
PDC
GND
CN1
CN2
CN3
OFF HOOK
DB1
SC1
SC2

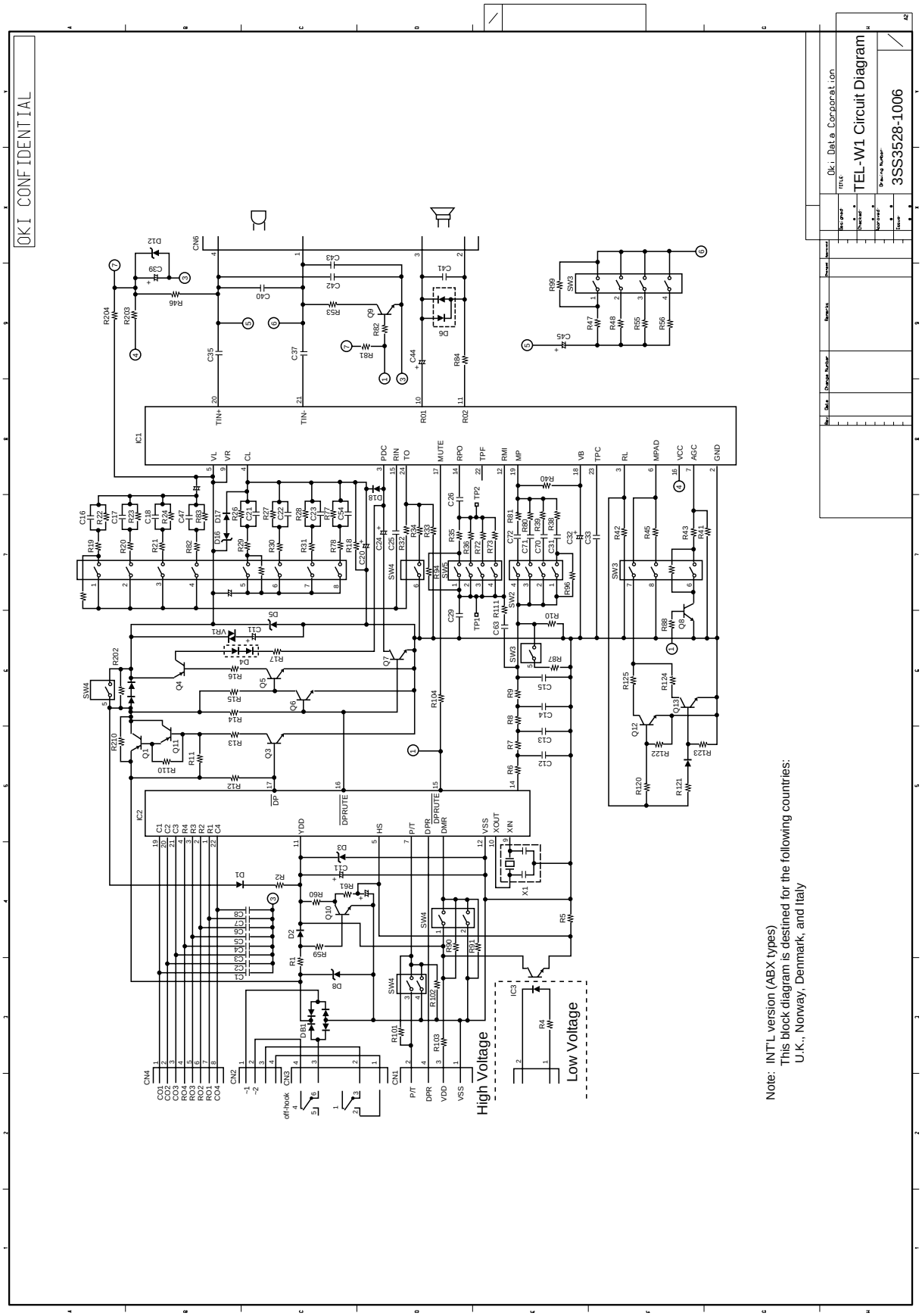
TELU PCB Assy (4UT5003-6262Z001) (1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	DB1	S1WBA40 Rectifying Diode	610A1027M0002C	1	
2					
3	SC1,SC2	SC57-FT Varistor	632A0035M8004	2	
4					
5	IC1	BA6566 BIP Liner IC	720A4029M0005	1	
6					
7	R1	RNM1/4C2-1.2KΩF RN Resistor	323A4024F0122	1	
8	R2	RNM1/4C2-10KΩF RN Resistor	323A4024F0103	1	
9	R3,R14,R15	RNM1/4C2-1KΩF RN Resistor	323A4024F0102	3	
10	R4	RD1/2YU39ΩJ RD Resistor	321A3430J0390	1	
11	R5	RNM1/4C2-1.8KΩF RN Resistor	323A4024F0182	1	
12	R6	RNM1/4C2-3.3KΩF RN Resistor	323A4024F0332	1	
13	R7	RD1/4YU330KΩJ RD Resistor	321A3420J0334	1	
14	R8	RNM1/4C2-470ΩF RN Resistor	323A4024F0471	1	
15	R9	RNM1/4C2-51KΩF RN Resistor	323A4024F0513	1	
16	R10	RNM1/4C2-47ΩF RN Resistor	323A4024F0470	1	
17	R11-R13	RNM1/4C2-12KΩF RN Resistor	323A4024F0123	3	
18	R16	RNM1/4C2-820ΩF RN Resistor	323A4024F0821	1	
19					
20	C1	SME25VB-22-OA CE Capacitor 25V 22μF	304A1123E1220	1	
21	C2,C5	SME16VB-10-OA CE Capacitor 16V 10μF	304A1123C1100	2	
22	C3	SME25VB-4R7-OA CE Capacitor 25V 4.7μF	304A1123E1479	1	
23	C4	URS1C221MNA1FA CE Capacitor 50V 220μF	304A1007C1221	1	
24	C6	CK92F1H474ZS CK Capacitor 50V 0.47μF	303A4117Z3474	1	
25	C7	ECQ-B1H393JF CQ-M Capacitor 50V 0.039μF	306A2038J1393	1	

TELU PCB Assy (4UT5003-6262Z001) (2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	C8	CK122C-1H272K CK Capacitor 50V 2700µF	303A4007K3272	1	
27	C9-C11,C14,C15	306A2026K1102 CQ-M Capacitor 50V 2700µF	C2FEC1H102K-FO	5	
28					
29	C12,C13	MM-3B2A563K CF Capacitor 100V 0.056µF	306A2228K2563	2	
30					
31	CN1	B4B-EH PC Connector	224A3535P0040	1	
32	CN2	224A3840P0040 PC Connector	DF3A-4P-2DSA	1	
33	CN3	223A3262P0008 Jack	TM3RA1-66	1	


OKI CONFIDENTIAL
Oki Data Corporation
TITLE
TEL-W1 Block Diagram
HAND SET
10KY
Speech Circuit & Dialling Circuit
TEL-W1
NTIF
Option
HOOK
Ringer Circuit
Switch setting
SW3
UK
Norway
Denmark
Italy
Note: INT'L version (ABX types)
This block diagram is destined for the following countries:
U.K., Norway, Denmark, and Italy


OKI CONFIDENTIAL
Oki Data Corporation
TEL-W1 Circuit Diagram
3SS3528-1006
High Voltage
Low Voltage
Note: INT'L version (ABX types)
This block diagram is destined for the following countries:
U.K., Norway, Denmark, and Italy

TEL-W1 PCB Assy (ABX) (4UT3528-1006Z006) (1/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C1-C8	CC2012SL1H471J Capacitor (CP)	303A3007K0471	8	
2	C9,C11,C22			0.0	Not mounted
3	C10	SME16VB-100-OA CE Capacitor	304A1123C1101	1	
4	C32	UMA1C470MCA1FA CE Capacitor	304A1117C1470	1	
5	C12	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	1	
6	C13	CK2012B1H472K CK Capacitor (CP)	303A6008K3472	1	
7	C14	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	1	
8	C15			0.0	Not mounted
9	C16	CK2012B1H393K CK Capacitor (CP)	303A6008K3393	1	
10	C17	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	1	
11	C18,C47	CK2012B1H273K CK Capacitor (CP)	303A6008K3273	2	
12	C19	MV50VC1D60 CE Capacitor	304A5008H1109	1	
13	C20,C62	MV50VC10D60 CE Capacitor	304A5008C1100	2	
14	C21,C23	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	2	
15	C24	MV35VC22F55 CE Capacitor	304A5008V1220	1	
16	C25,C54,C70	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	3	
17	C26	CK2012B1C224K CK Capacitor (CP)	303A6008K1224	1	
18	C27,C28			0.0	Not mounted
19	C29	CK2012B1H563K CK Capacitor (CP)	303A6008K3563	1	
20	C30,C34			0.0	Not mounted
21	C31	CK2012B1H683K CK Capacitor (CP)	303A6008K3683	1	for NORWAY
	CK2012B1H563K	303A6008K3563 1 CK Capacitor (CP)	for DENMARK		
22	C33	CK2012B1H473K CK Capacitor (CP)	303A6008K3473	1	
23	C35,C37	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	2	
24	C36,C38			0.0	Not mounted
25	C39	MV16VC47F60 CE Capacitor	304A5008C1470	1	
26	C40-C43	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	4	

TEL-W1 PCB Assy (ABX) (4UT3528-1006Z006) (2/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
27	C44	MV50VC1D60 CE Capacitor	304A5008H1109	1	
28	C45	UMA1H470MCA1FA CE Capacitor	304A1117C1470	1	
29	C46	F931C106MC CS Capacitor (CP)	305A5012C1100	1	
30	C63	CK2012B1C224K CK Capacitor (CP)	303A6008K1224	1	
31	C71	CK2012B1H333K CK Capacitor (CP)	303A6008K3333	1	
32	C72	CK2012B1E683K CK Capacitor (CP)	303A6008K2683	1	
33					
34	CN1	B4B-PH-K-S PC Connector	224A3529P0040	1	
35	CN2	B5B-PH-K-S PC Connector	224A3529P0050	1	
36	CN3	B4B-EH PC Connector	224A3535P0040	1	
37	CN4	B8B-PH-K-S PC Connector	224A3529P0080	1	
38	CN5	DF3A-4P-2DSA PC Connector	224A3840P0040	1	
39	CN6	B2B-PH-K-S PC Connector	224A3529P0020	1	
40					
41	DB1	U1GB42 Rectifying Diode	610A1025N0001	1	
42					
43	D1	RB411D Signal Diode (CP)	611A0239N0001	1	
44	D2	SS100MA80VKCP Signal Diode (CP)	611A0000N00021		
45	D3	MTZ5.1BHJ Zener Diode	613A1391L8052	1	
46	D4	SS100MA80VSCP Signal Diode (CP)	611A0000N0003	1	
47	D5	UIZB15 Zener Diode	613A2251N0030	1	
48	D6	SS100MA80VSCP Signal Diode (CP)	611A0000N0003	1	
49	D8	UIZB150 Zener Diode	613A2251N0030	1	
50	D10-D12	SFPM-62 Rectifying Diode	610A0026N0026	3	
51					
52	IC1	BA6569AFP BIP Linear IC (SO)	720A4029N0012	1	

TEL-W1 PCB Assy (ABX) (4UT3528-1006Z006) (3/5)

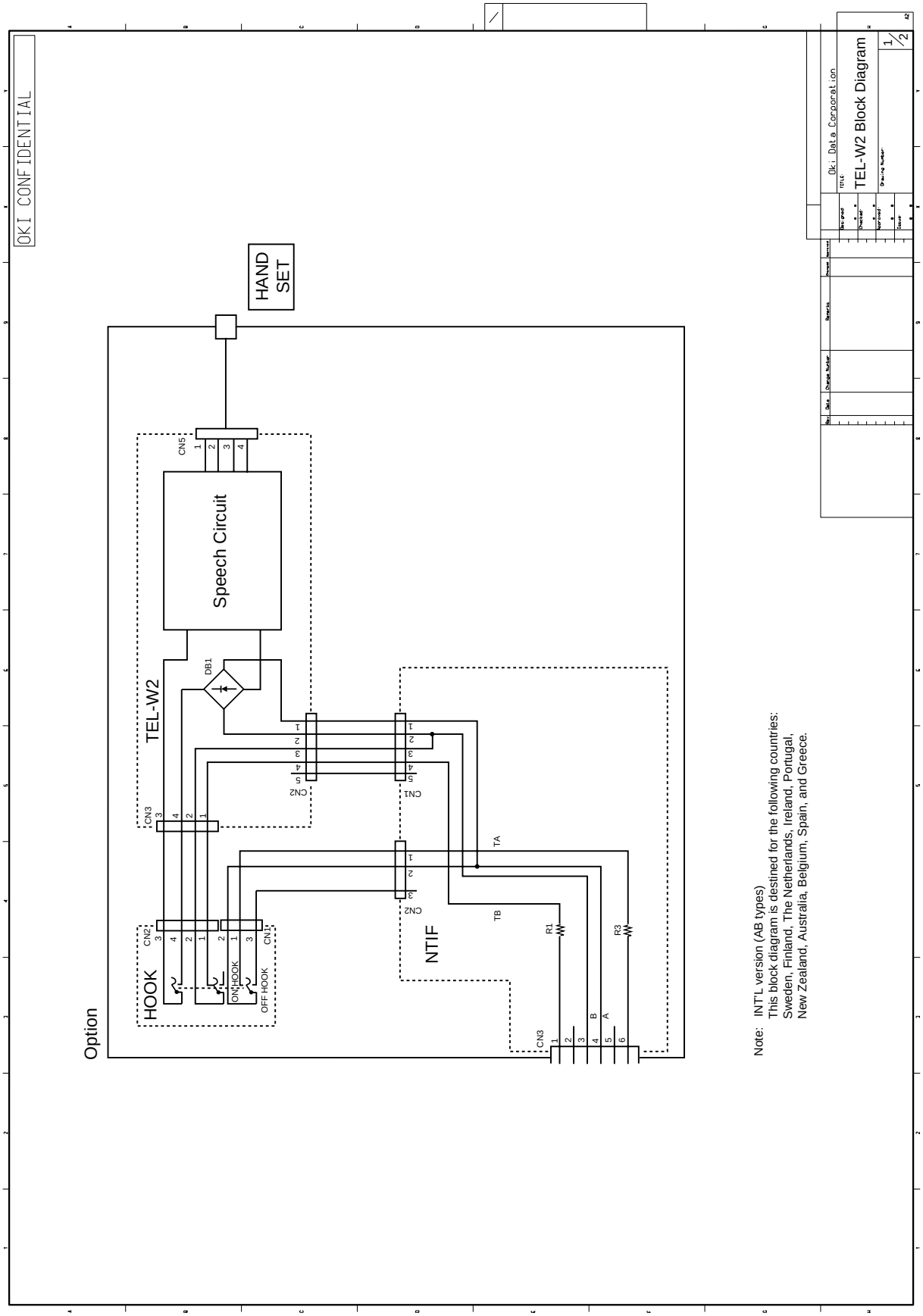
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
53	IC2	LC7368J MOS Linear IC	730A4033M0006	1	
54	IC3	PS2561L-1L Photo Coupler (SO)	652A0123N0035	1	
55					
56	Q1	2SA-1156-K PNP-HF-TR	600A1223M0004K	1	
57	Q3	2SC4497-O NPN-HF-TR (CP)	602A1025N0062O	1	
58	Q4	2SA1313-O/Y PNP-HF-TR (CP)	600A1025M0018	1	
59	Q5,Q6,Q8-Q10,Q12,Q13	2SC2712-Y/G NPN-HF-TR	602A1025M0033	7	
60	Q7			0.0	Not mounted
61					
62	Q11	600A1025N0038 2SA1384 PNP-HF-TR (CP)		1	
63					
64	R1,R12	RM73B2A474J RN Resistor (CP)	323A5003J0474	2	
65	R2	RM73B2A272J RN Resistor (CP)	323A5003J0272	1	
66	R3,R18			0.0	Not mounted
67	R4	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
68	R5			0.0	Not mounted
69	R6	RM73B2A622F RN Resistor (CP)	323A5003F0622	1	
70	R7,R9	RM73B2A222F RN Resistor (CP)	323A5003F0222	2	
71	R8	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
72	R10	RM73B2A112F RN Resistor (CP)	323A5003F0112	1	
73	R11	RM73B2A104J RN Resistor (CP)	323A5003J0104	1	
74	R13	RM73B2A223J RN Resistor (CP)	323A5003J0223	1	
75	R14 -R16	RM73B2A333J RN Resistor (CP)	323A5003J0333	3	
76	R17			0.0	Not mounted
77	R19	RM73B2A182F RN Resistor (CP)	323A5003F0182	1	
78	R20	RM73B2A332F RN Resistor (CP)	323A5003F0332	1	
79	R21	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	

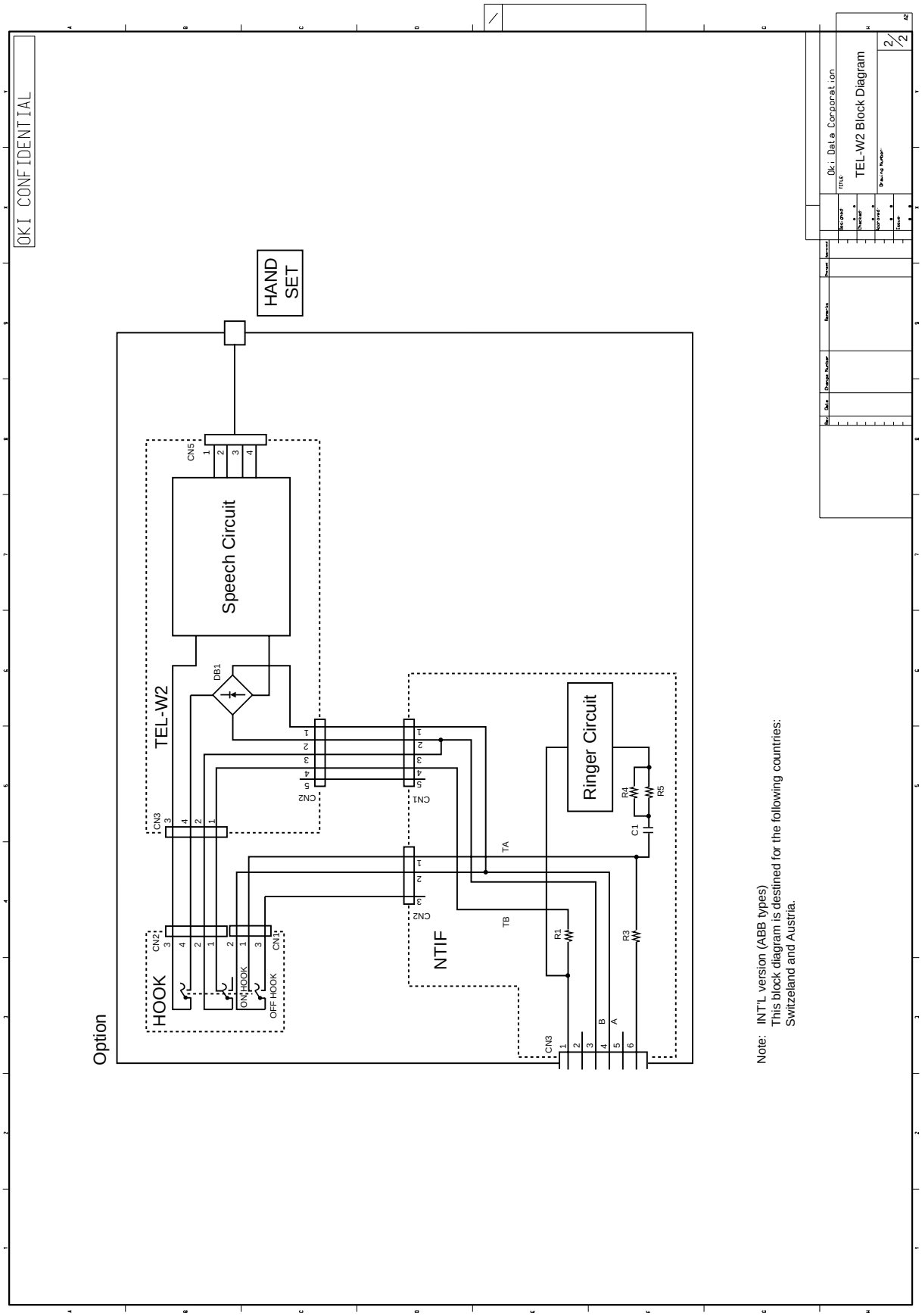
TEL-W1 PCB Assy (ABX) (4UT3528-1006Z006) (4/5)

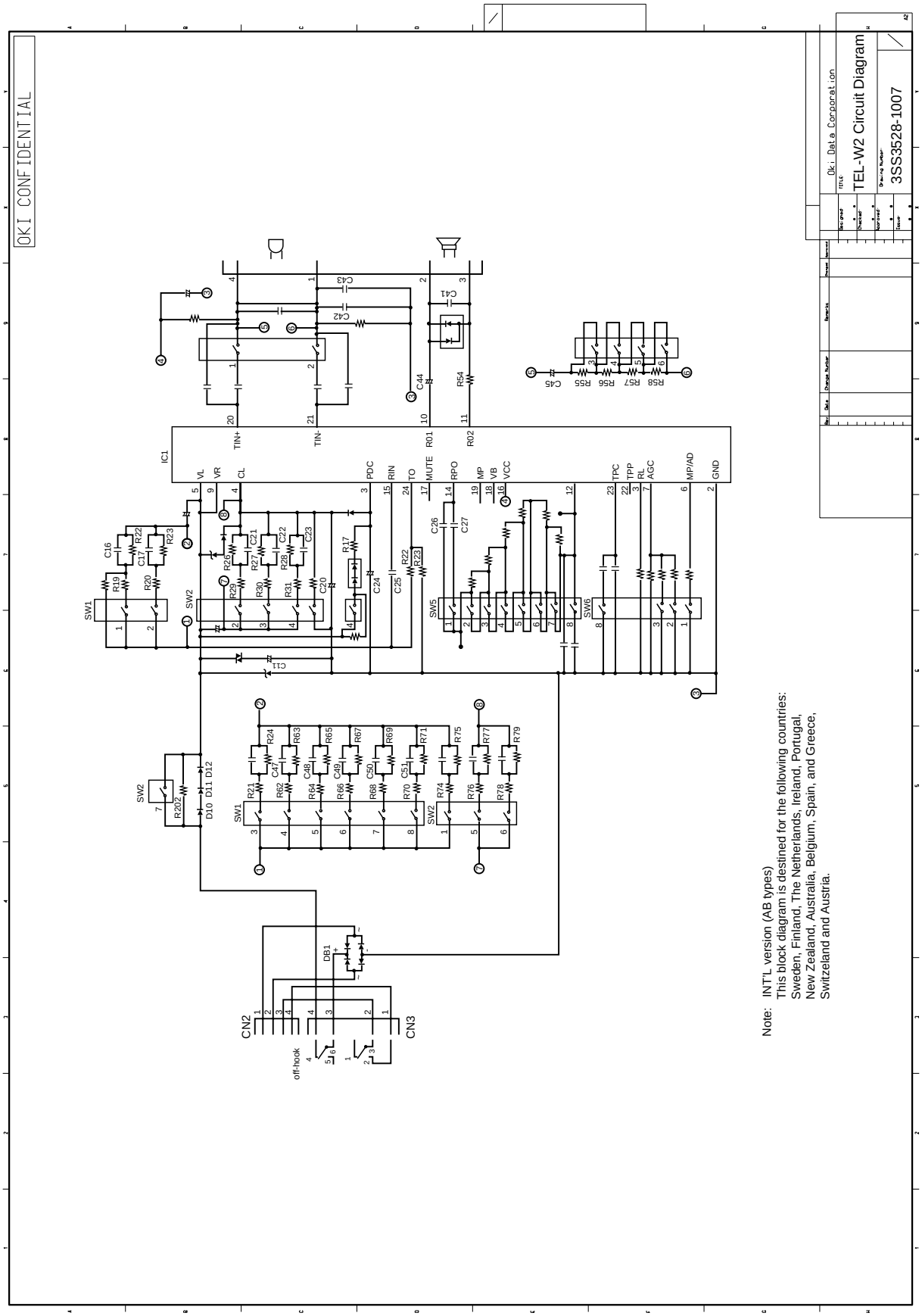
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
80	R22,R80	RM73B2A332F RN Resistor (CP)	323A5003F0332	2	
81	R23	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
82	R24	RM73B2A622F RN Resistor (CP)	323A5003F0622	1	
83	R25,R49			0.0	Not mounted
84	R26,R28,R51,R77	RM73B2A103F RN Resistor (CP)	323A5003F0103	4	
85	R27	RM73B2A132F RN Resistor (CP)	323A5003F0132	1	
86	R29,R31	RM73B2A751F RN Resistor (CP)	323A5003F0751	2	
87	R30,R76,R203	2125JPW Chip Jumper (CP)	323A5003P0001	3	
88	R32	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
89	R33	RM73B2A470F RN Resistor (CP)	323A5003F0470	1	
90	R34	RM73B2A620F RN Resistor (CP)	323A5003F0620	1	
91	R35,R73	RM73B2A123F RN Resistor (CP)	323A5003F0123	2	
92	R36	RM73B2A512F RN Resistor (CP)	323A5003F0512	1	
93	R38	RM73B2A911F RN Resistor (CP)	323A5003F0911	1	for NORWAY
		RM73B2A431F RN Resistor (CP)	323A5003F0431	1	for DENMARK
94	R39	RM73B2A101F RN Resistor (CP)	323A5003F0101	1	
95	R40	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
96	R41	RM73B2A103J RN Resistor (CP)	323A5003J0103	1	
97	R42	RM73B2H390J RN Resistor (CP)	323A5030J0390	1	
98	R43	RM73B2A561F RN Resistor (CP)	323A5003F0561	1	
99	R45	RM73B2A152F RN Resistor (CP)	323A5003F0152	1	
100	R46,R53,R62	RM73B2A102F RN Resistor (CP)	323A5003F0102	3	
101	R47	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
102	R48	RM73B2A432F RN Resistor (CP)	323A5003F0432	1	
103	R52	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	

TEL-W1 PCB Assy (ABX) (4UT3528-1006Z006) (5/5)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
104	R54	RM73B2A301F RN Resistor (CP)	323A5003F0301	1	
105	R55	RM73B2A821F RN Resistor (CP)	323A5003F0821	1	
106	R56	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
107	R59,R61	RM73B2A103J RN Resistor (CP)	323A5003J0103	2	
108	R60	RM73B2A333J RN Resistor (CP)	323A5003J0333	1	
109	R63,R72	RM73B2A392F RN Resistor (CP)	323A5003F0392	2	
110	R81	RM73B2A911F RN Resistor (CP)	323A5003F0911	1	
111	R87	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
112	R88,R122-R124	RM73B2A103F RN Resistor (CP)	323A5003F0103	4	
113	R103,R104	RM73B2A512J RN Resistor (CP)	323A5003J0512	2	
114	R110	RM73B2A105J RN Resistor (CP)	323A5003J0105	1	
115	R111	RM73B2A203J RN Resistor (CP)	323A5003J0203	1	
116	R120,R121	RM73B2A102F RN Resistor (CP)	323A5003F0102	2	
117	R125	RM73B2A223F RN Resistor (CP)	323A5003F0223	1	
118	R90-R102,R111-R204, R210, 211			0.0	Not mounted
119					
120	SW1	SSGM28-OFF DIP Switch	206A1073P0801	1	
121	SW2	SSGM24-OFF DIP Switch	206A1073P0401	1	
122	SW3	SSGM18-OFF DIP Switch	206A1073P0801	1	
123	SW4	SSGM26-OFF DIP Switch	206A1073P0601	1	
124	SW5	SSGM84-OFF DIP Switch (SMT)	206A1074P0400	1	
125					
126	VR1	SV-3SSLF-H6K Varistor	632A0030M8001	1	
127					
128	X1	381A1033B0003 EF0-EC3584A4 Ceramic Oscillator		1	


OKI CONFIDENTIAL
HAND SET
CN5
Speech Circuit
TEL-W2
DB1
CN3
CN2
CN1
HOOK
ON HOOK
OFF HOOK
NTIF
TA
TB
R1
R3
Option
Oki Data Corporation
TEL-W2 Block Diagram
1/2
Note: INTL version (AB types)
This block diagram is destined for the following countries:
Sweden, Finland, The Netherlands, Ireland, Portugal,
New Zealand, Australia, Belgium, Spain, and Greece.


OKI CONFIDENTIAL
HAND SET
Speech Circuit
TEL-W2
DB1
CN5
CN3
CN2
CN1
HOOK
ON HOOK
OFF HOOK
NTIF
Ringer Circuit
R1
R2
R3
R4
R5
C1
TA
TB
Option
Note: INT'L version (ABB types)
This block diagram is destined for the following countries:
Switzeland and Austria.
Oki Data Corporation
TEL-W2 Block Diagram
2/2


OKI CONFIDENTIAL
Oki Data Corporation
TEL-W2 Circuit Diagram
3SS3528-1007
IC1
SW1
SW2
SW5
SW6
CN2
CN3
DB1
off-hook
Note: INT'L version (AB types)
This block diagram is destined for the following countries:
Sweden, Finland, The Netherlands, Ireland, Portugal,
New Zealand, Australia, Belgium, Spain, and Greece,
Switzeland and Austria.

TEL-W2 PCB Assy (AB) (4UT3528-1007Z003) (1/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C11			0.0	Not mounted
2	C16	CK2012B1H393K CK Capacitor (CP)	303A6008K3393	1	
3	C17	CK2012B1H183K CK Capacitor (CP)	303A6008K3183	1	
4	C18	CK2012B1H273K CK Capacitor (CP)	303A6008K3273	1	
5	C19	UMA1H010MCA1BA CE Capacitor	304A1117H1109	1	
6	C20	UMA1C100MCA1FA CE Capacitor	304A1117C1100	1	
7	C21	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	1	
8	C22			0.0	Not mounted
9	C23	CK2012B1C154K CK Capacitor (CP)	303A6008K1154	1	
10	C24	UMA1C220MCA1BA CE Capacitor	304A1117C1220	1	
11	C25-C27	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	3	
12	C29,C33	CK2012R1H223K CK Capacitor (CP)	303A6008K3223	2	
13	C35,C36	CK2102R1H233K CK Capacitor (CP)	303A6008K3233	2	
14	C39	UMA1C470MCA1FA CE Capacitor	304A1117C1470	1	
15	C40-C43	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	4	
16	C44	UMA1H010MCA1BA CE Capacitor	304A1117H1109	1	
17	C45	UMA1C470MCA1FA CE Capacitor	304A1117C1470	1	
18	C47	CK2012B1H123K CK Capacitor (CP)	303A6008K3123	1	
19	C48	CK2012B1H273K CK Capacitor (CP)	303A6008K3273	1	
20	C49	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	1	
21	C50	CK2012R1H223K CK Capacitor (CP)	303A6008K3223	1	
22	C51	CK2012B1H473K CK Capacitor (CP)	303A6008K3473	1	
23	C53			0.0	Not mounted
24	C54	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	1	
25	C55			0.0	Not mounted
26	C57	CK2012R1H223K CK Capacitor (CP)	303A6008K3223	1	

TEL-W2 PCB Assy (AB) (4UT3528-1007Z003) (2/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
27	C59,C60	CK2012B1H682K CK Capacitor (CP)	303A6008K3682	2	
28	C61	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	1	
29	C62	UMA1C100MCA1FA CE Capacitor	304A1117C1100	1	
30					
31	CN2	B5B-PH-K-S PC connector	224A3529P0050	1	
32	CN3	B4B-EH PC Connector	224A3535P0040	1	
33	CN5	DF-3A-4P-2DSA PC Connector	224A3840P0040	1	
34					
35	D4,D6	SS100MA80VSCP Signal Diode (CP)	611A0000N0003	2	
36	D5	U1ZB15 Zener Diode (CP)	613A2251N0030	1	
37	D10-D12	SFPM-62 Rectifying Diode (CP)	610A0026N0026	3	
38	D15			0.0	Not mounted
39	D16			0.0	Not mounted
40	D17			0.0	Not mounted
41					
42	DB1	U1GB42 Rectifying Diode (CP)	610A1025N0001	1	
43					
44	IC1	BA6569AFP BIP Linear IC (SP)	720A4029N0012	1	
45					
46	R17	RM73B2A333F RN Resistor (CP)	323A5003F0333	1	
47	R19	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
48	R20	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
49	R21	RM73B2A132F RN Resistor (CP)	323A5003F0132	1	
50	R22	RM73B2A162F RN Resistor (CP)	323A5003F0162	1	
51	R23	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
52	R24	RM73B2A622F RN Resistor (CP)	323A5003F0622	1	
53	R25	RM73B2A562F RN Resistor (CP)	323A5003F0562	1	
54	R26	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

TEL-W2 PCB Assy (AB) (4UT3528-1007Z003) (3/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
55	R27	RM73B2A132F RN Resistor (CP)	323A5003F0132	1	
56	R28	RM73B2A104F RN Resistor (CP)	323A5003F0104	1	
57	R29	RM73B2A221F RN Resistor (CP)	323A5003F0221	1	
58	R30,R43	2125JPW Chip Jumper	323A5003P0001	2	
59	R31	RM73B2A361F RN Resistor (CP)	323A5003F0361	1	
60	R32	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
61	R33	RM73B2A470F RN Resistor (CP)	323A5003F0470	1	
62	R34	RM73B2A163F RN Resistor (CP)	323A5003F0163	1	
63	R35	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
64	R36	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
65	R41	RM73B2A103J RN Resistor (CP)	323A5003J0103	1	
66	R42	3RM73BA390J RN Resistor (CP)	323A5040J0390	1	
67	R44	RM73B2A561F RN Resistor (CP)	323A5003F0561	1	
68	R45	RM73B2A152F RN Resistor (CP)	323A5003F0152	1	
69	R46,R53	RM73B2A102F RN Resistor (CP)	323A5003F0102	2	
70	R54	RM73B2A301F RN Resistor (CP)	323A5003F0301	1	
71	R55	RM73B2A201F RN Resistor (CP)	323A5003F0201	1	
72	R56	RM73B2A391F RN Resistor (CP)	323A5003F0391	1	
73	R57	RM73B2A821F RN Resistor (CP)	323A5003F0821	1	
74	R58	RM73B2A162F RN Resistor (CP)	323A5003F0162	1	
75	R62	RM73B2A331F RN Resistor (CP)	323A5003F0331	1	
76	R63	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	
77	R64	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
78	R65	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
79	R66	RM73B2A182F RN Resistor (CP)	323A5003F0182	1	

TEL-W2 PCB Assy (AB) (4UT3528-1007Z003) (4/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
80	R67	RM73B2A332F RN Resistor (CP)	323A5003F0332	1	
81	R68	RM73B2A182F RN Resistor (CP)	323A5003F0182	1	
82	R69	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
83	R70	RM73B2A162F RN Resistor (CP)	323A5003F0162	1	
84	R71	RM73B2A622F RN Resistor (CP)	323A5003F0622	1	
85	R74,R75			0.0	Not mounted
86	R76	RM73B2A431F RN Resistor (CP)	323A5003F0431	1	
87	R77	RM73B2A104F RN Resistor (CP)	323A5003F0104	1	
88	R78,R79			0.0	Not mounted
89	R82	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
90	R83	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	
91	R84	RM73B2A822F RN Resistor (CP)	323A5003F0822	1	
92	R85			0.0	Not mounted
93	R86,R202			0.0	Not mounted
94					
95	SW1, SW2	SSGM28-OFF DIP Switch (SMT)	206A1073P0801	2	
96	SW3	SSGM18-OFF DIP Switch	206A1073P0800	1	
97	SW5	SSGM88-OFF DIP Switch	206A1074P0800	1	
98	SW6	SSGM26-OFF DIP Switch	206A1073P0601	1	
99					
100	VR1			0.0	Not mounted

TEL-W2 PCB Assy (ABB) (4UT3528-1007Z004) (1/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C11			0.0	Not mounted
2	C16	CK2012B1H183K CK Capacitor (CP)	303A6008K3183	1	
3	C17	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	1	
4	C18			0.0	Not mounted
5	C19	UMA1H010MCA1BA CE Capacitor	304A1117H1109	1	
6	C20	UMA1C100MCA1FA CE Capacitor	304A1117C1100	1	
7	C21	CK2012B1E683K CK Capacitor (CK)	303A6008K2683	1	
8	C22			0.0	Not mounted
9	C23	CK2012B1H393K CK Capacitor (CP)	303A6008K3393	1	
10	C24	UMA1C220MCA1BA CE Capacitor	304A1117C1220	1	
11	C25	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	1	
12	C26,C27	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	2	
13	C29	CK2012B1H333K CK Capacitor (CP)	303A6008K3333	1	
14	C33			0.0	Not mounted
15	C34			0.0	Not mounted
16	C35,C36	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	2	
17	C39	UMA1C470MCA1FA CE Capacitor	304A1117C1470	1	
18	C40 - C43	CK2012B1H103K4 CK Capacitor (CP)	303A6008K3103		
19	C44	UMA1H010MCA1BA CE Capacitor	304A1117H1109	1	
20	C45	UMA1C470MCA1FA CE Capacitor	304A1117C1470	1	
21	C47 - C51,C53 - C56			0.0	Not mounted
22					
23	C57	CK2012B1H223K CK Capacitor (CP)	303A6008K3223	1	
24	C58			0.0	Not mounted
25	C59,C60	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	2	
26	C61	CK2012R1H223K CK Capacitor (CP)	303A6008K3223	1	
27	C62	UMA1C100MCA1FA CE Capacitor	304A1117C1100	1	

TEL-W2 PCB Assy (ABB) (4UT3528-1007Z004) (2/4)

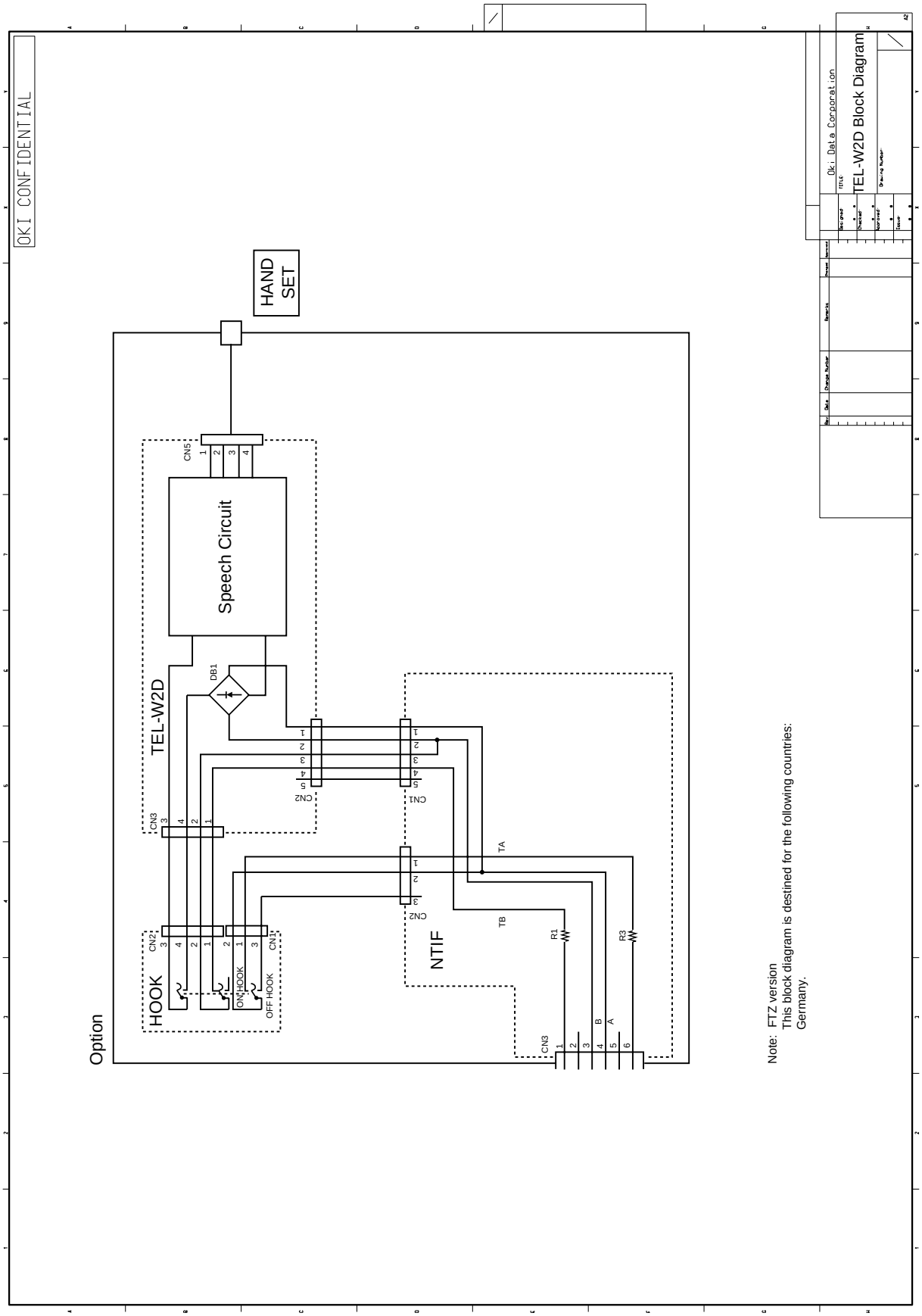
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
28					
29	CN2	B5B-PH-K-S PC Connector	224A3529P0050	1	
30	CN3	B4B-EH PC Connector	224A3535P0040	1	
31	CN5	DF3A-4P-2DSA PC Connector	224A3840P0040	1	
32					
33	DB1	U1GB42 Rectifying Diode (CP)	610A1025N0001	1	
34					
35	D4,D15-D17			0.0	Not mounted
36					
37	D5	1Z15A Zener Diode	613A2251N0030	1	
38	D6	SS100MA80VSCP Signal Diode (CP)	611A0000N0003	1	
39	D10-D12	SFPM-62 Rectifying Diode (CP)	610A0026N0026	3	
40					
41	IC1	BA6569AFP BIP Linear IC (SP)	720A4029N0012	1	
42					
43	R17,R18			0.0	Not mounted
44	R19	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
45	R20	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
46	R21			0.0	Not mounted
47	R22	RM73B2A432F RN Resistor (CP)	323A5003F0432	1	
48	R23	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
49	R24			0.0	Not mounted
50	R25	RM73B2A472F RN Resistor (CP)	323A5003F0472	1	
51	R26	RM73B2A103F RN Resistor (CP)	323A5003F0103	1	
52	R27	RM73B2A162F RN Resistor (CP)	323A5003F0162	1	
53	R28			0.0	Not mounted
54	R29	RM73B2A511F RN Resistor (CP)	323A5003F0511	1	
55	R30	RM73B2A751F RN Resistor (CP)	323A5003F0751	1	
56	R31			0.0	Not mounted

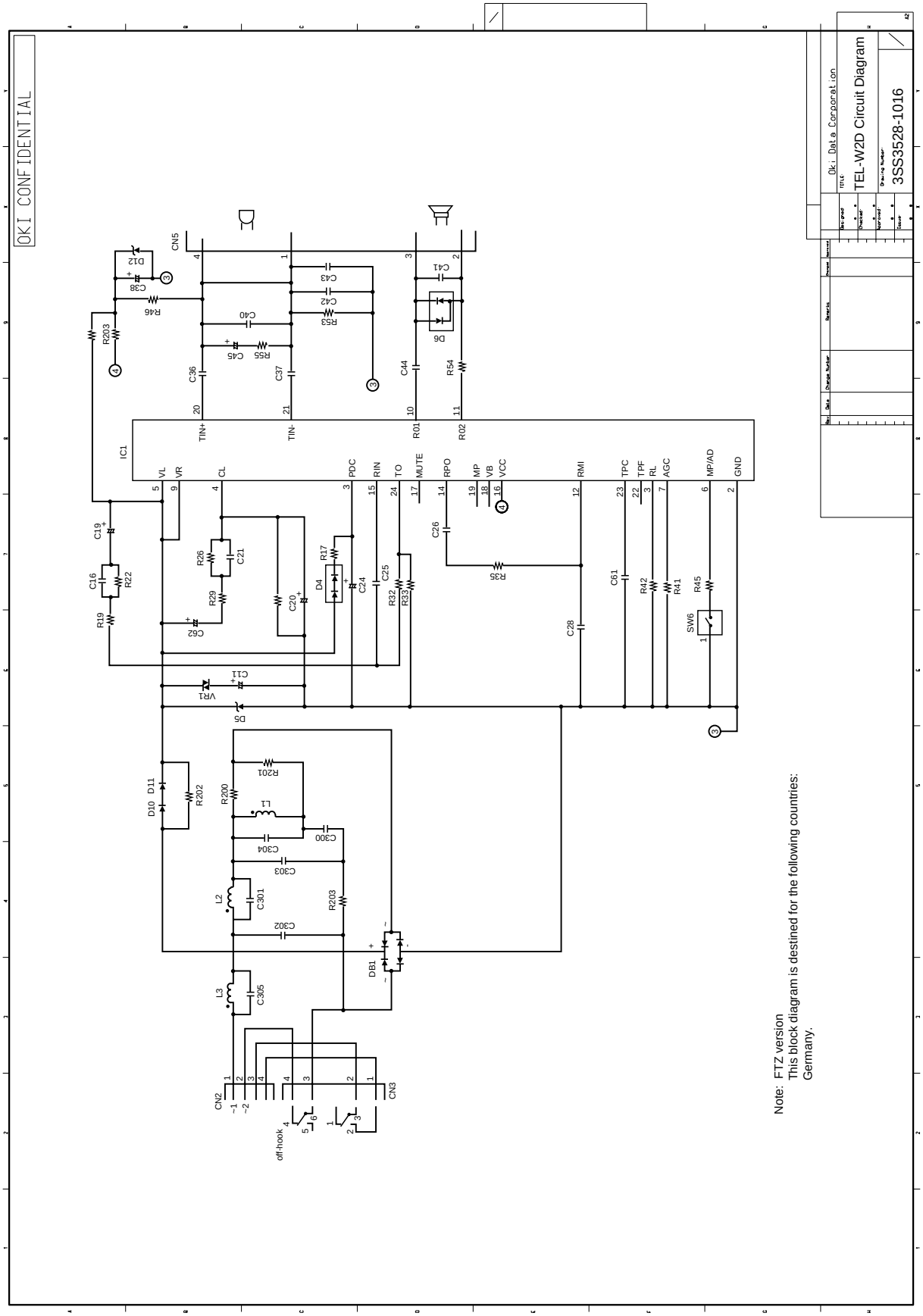
TEL-W2 PCB Assy (ABB) (4UT3528-1007Z004) (3/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
57	R32	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
58	R33	RM73B2A470F RN Resistor (CP)	323A5003F0470	1	
59	R34	RM73B2A163F RN Resistor (CP)	323A5003F0163	1	
60	R35	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
61	R36	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
62	R37			0.0	Not mounted
63	R41	RM73B2A512J RN Resistor (CP)	323A5003J0512	1	
64	R42	RM73B2A390J RN Resistor (CP)	323A5040J0390	1	
65	R43			0.0	Not mounted
66	R44	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
67	R45	RM73B2A152F RN Resistor (CP)	323A5003F0152	1	
68	R46,R53	RM73B2A102F RN Resistor (CP)	323A5003F0102	2	
69	R54	RM73B2A301F RN Resistor (CP)	323A5003F0301	1	
70	R55	RM73B2A201F RN Resistor (CP)	323A5003F0201	1	
71	R56	RM73B2A391F RN Resistor (CP)	323A5003F0391	1	
72	R57	RM73B2A821F RN Resistor (CP)	323A5003F0821	1	
73	R58	RM73B2A162F RN Resistor (CP)	323A5003F0162	1	
74	R62-R71,R74-R81			0.0	Not mounted
75					
76	R82	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
77	R83	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	
78	R84	RM73B2A822F RN Resistor (CP)	323A5003F0822	1	
79	R85,R86			0.0	Not mounted
80	R202	2125JPW Chip Jumper (CP)	323A5003P0001	1	
81					
82	SW1, 2	SSGM28-OFF DIP Switch (SMT)	206A1073P0801	2	

TEL-W2 PCB Assy (ABB) (4UT3528-1007Z004) (4/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
83	SW3	SSGM18-OFF DIP Switch	206A1073P0800	1	
84	SW5	SSGM88-OFF DIP Switch	206A1074P0800	1	
85	SW6	SSGM26-OFF DIP Switch	206A1073P601	1	
86					
87	VR1			0.0	Not mounted


OKI CONFIDENTIAL
HAND SET
Option
HOOK
TEL-W2D
Speech Circuit
NTIF
CN1
CN2
CN3
CN5
DB1
R1
R3
TA
TB
ON HOOK
OFF HOOK
Oki Data Corporation
TEL-W2D Block Diagram
Note: FTZ version
This block diagram is destined for the following countries:
Germany.


OKI CONFIDENTIAL
Oki Data Corporation
TEL-W2D Circuit Diagram
3SS3528-1016
IC1
CN5
CN2
CN3
DB1
SW6
off-hook
Note: FTZ version
This block diagram is destined for the following countries:
Germany.

TEL-W2D PCB Assy (4UT3528-1016Z005) (1/3)

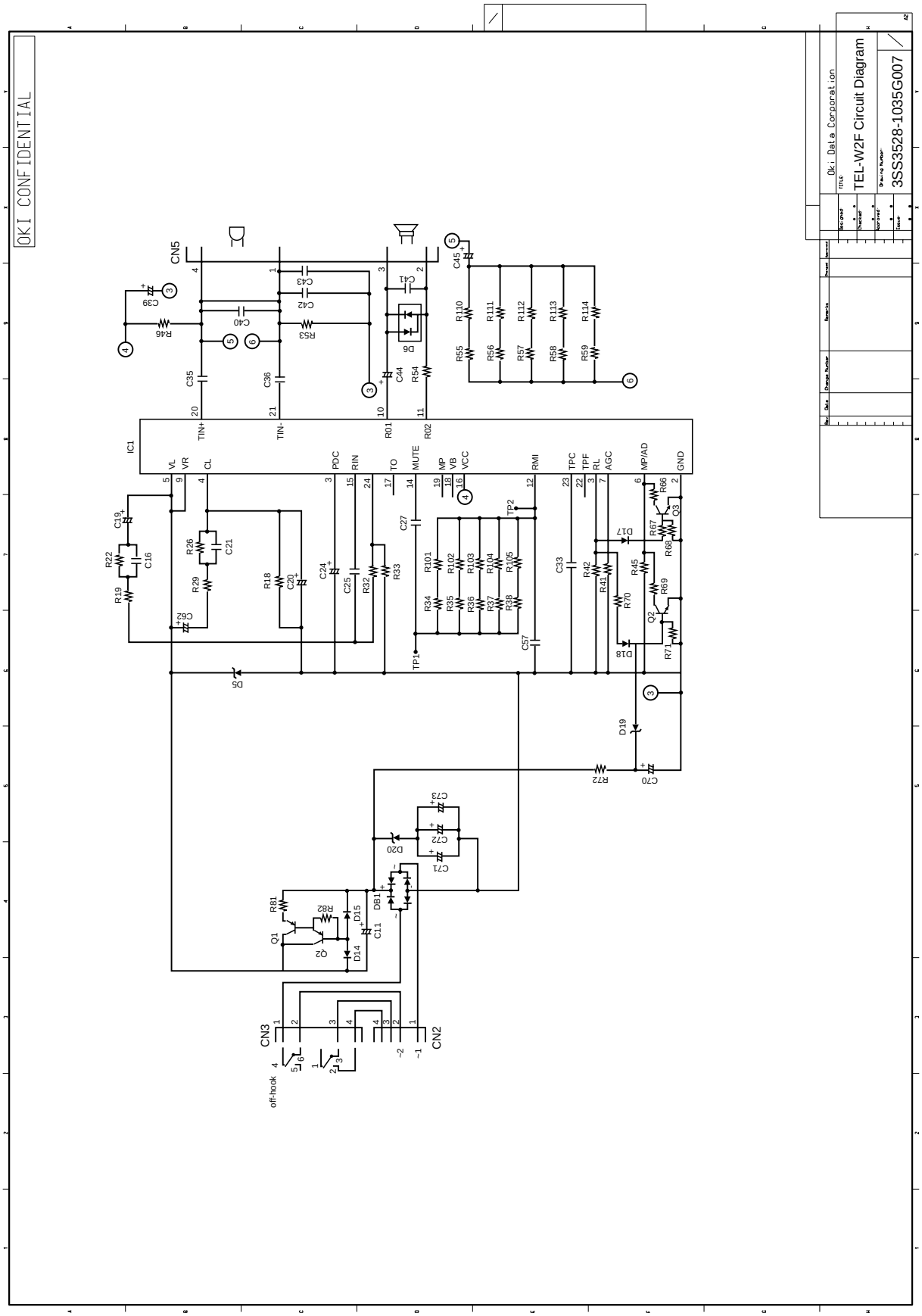
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C11			0.0	Not mounted
2	C16,C36,C37	CK2012B1H153K CK Capacitor (CP)	303A6008K3153	3	
3	C19,C44	UMA1H010MCA1BA CE Capacitor	304A1117H1109	2	
4	C20	UMA1C100MCA1FA CE Capacitor	304A1117C1100	1	
5	C21			0.0	Not mounted
6	C24	UMA1C220MCA1BA CE Capacitor	304A1117C1220	1	
7	C25,C29	CK2012R1E104K CK Capacitor (CP)	303A5008K2104	2	
8	C26	CK2012B1C224K CK Capacitor (CP)	303A6008K1224	1	
9	C39,C45	UMA1C470MCA1FA CE Capacitor	304A1117C1470	2	
10	C40 -C43	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	4	
11	C61	CK2012B1H563K CK Capacitor (CP)	303A6008K3563	1	
12	C62			0.0	Not mounted
13	C300,C305	CQMOA-92MC2A104J CQ-M Capacitor	306A2055J2104	2	
14	C301	CQMOA-92MC2A682J CQ-M Capacitor	306A2055J2682	1	
15	C302	CQMOA-92MC2A473J CQ-M Capacitor	306A2055J2473	1	
16	C303	CQMOA-92MC2A393J CQ-M Capacitor	306A2055J2393	1	
17	C304	CQMOA-92MC2A393J CQ-M Capacitor	306A2055J2393	1	
18					
19	CN2	B5B-PH-K-S PC Connector	224A3529P0050	1	
20	CN3	B4B-EH PC Connector	224A3535P0040	1	
21	CN5	DF3A-4P-2DSA PC Connector	224A3840P0040	1	
22					
23	DB1	U1G4B42 Rectifying Diode (CP)	610A1025N0001	1	
24					
25	D4,D6			0.0	Not mounted
26	D5	U1ZB15 Zener Diode (CP)	613A2251N0030	1	

TEL-W2D PCB Assy (4UT3528-1016Z005) (2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
27	D10,D11	SFPM-62 Rectifying Diode	610A0026N0026	2	
28	D12			0.0	Not mounted
29					
30	IC1	BA6669AFP BIP Linear IC	720A4029N0012	1	
31					
32	L1			0.0	Not mounted
33	L2	LHL 10-153J H Coil	353A1013J0153	1	
34	L3	LHL 10-102J H Coil	353A1013J0102	1	
35					
36	R17			0.0	Not mounted
37	R18,R204			0.0	Not mounted
38	R19	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
39	R22	RM73B2A822F RN Resistor (CP)	323A5003F0822	1	
40	R26			0.0	Not mounted
41	R29			0.0	Not mounted
42	R32,R205	RM73B2A471F RN Resistor (CP)	323A5003F0471	2	
43	R33	RM73B2A270F RN Resistor (CP)	323A5003F0270	1	
44	R35	RM73B2A432F RN Resistor (CP)	323A5003F0432	1	
45	R41	RM73B2A103J RN Resistor (CP)	323A5003J0103	1	
46	R42	RM73B2H390J RN Resistor (CP)	323A5030J0390	1	
47	R45	RM73B2A152F RN Resistor (CP)	323A5003F0152	1	
48	R46,R53	RM73B2A102F RN Resistor (CP)	323A5003F0102	2	
49	R54	RM73B2A301F RN Resistor (CP)	323A5003F0301	1	
50	R55	RM73B2A621F RN Resistor (CP)	323A5003F0621	1	
51	R200,R203	2125JPW Chip Jumper (CP)	323A5003P0001	2	
52	R201	RM73B2A562F RN Resistor (CP)	323A5003F0562	1	
53	R202			0.0	Not mounted
54					

TEL-W2D PCB Assy (4UT3528-1016Z005) (3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
55	SW6	SSGM24-OFF DIP Switch	206A1073P0401	1	
56					
57	VR1			0.0	Not mounted


OKI CONFIDENTIAL
Oki Data Corporation
TEL-W2F Circuit Diagram
3SS3528-1035G007
IC1
CN5
CN3
CN2
off-hook

TEL-W2F PCB Assy (4UT3528-1035Z0007) (1/3)

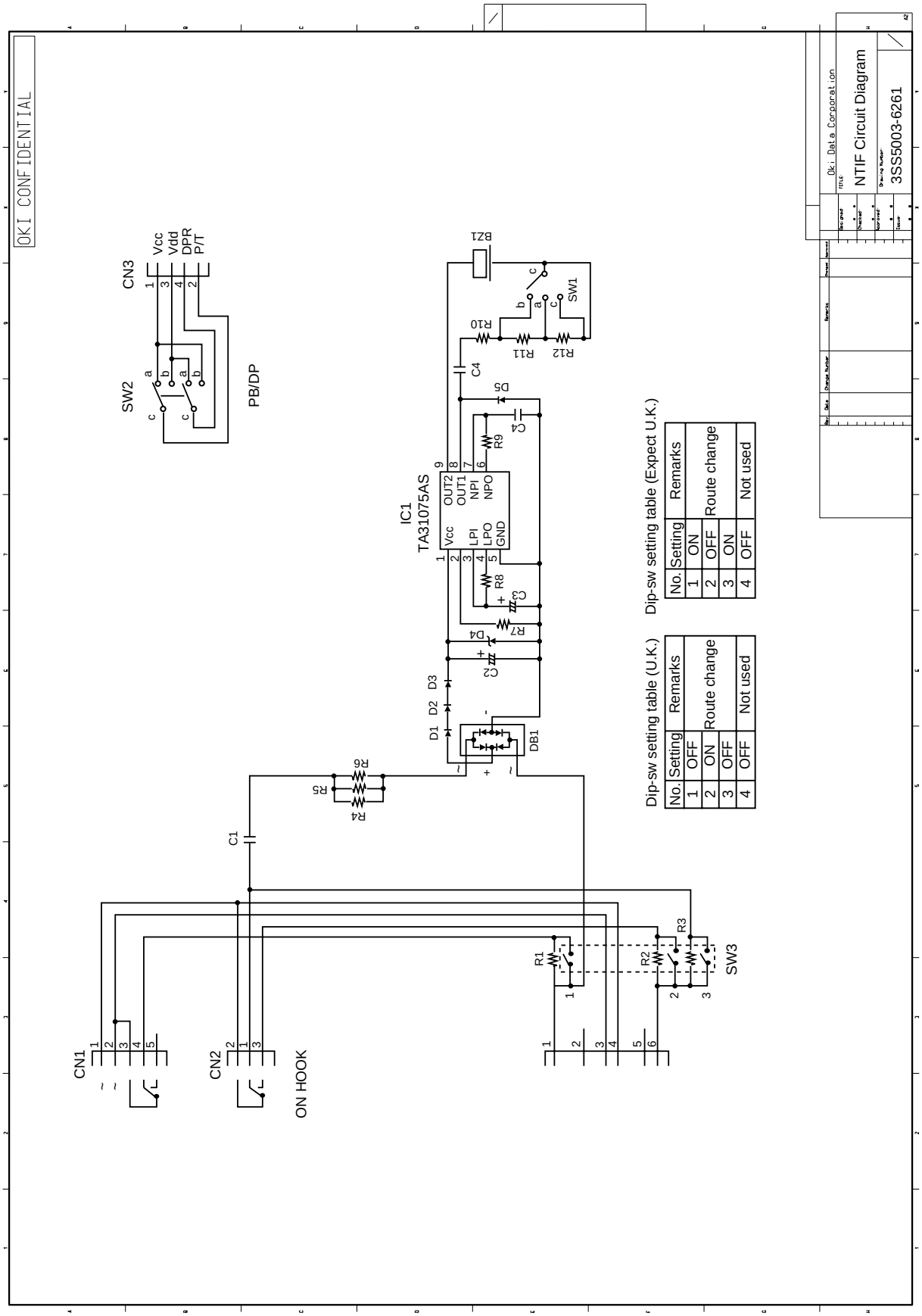
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	C11	SME100VB-3R3BP-OA CE Capacitor	304A1122A2339	1	
2	C16	CK2012B1H333K CK Capacitor (CP)	303A6008K3333	1	
3	C19,C44	UMA1H010MCA1BA CE Capacitor	304A1117H1109	2	
4	C20,C62	UMA1C100MCA1FA CE Capacitor	304A1117C1100	2	
5	C24	UMA1C220MCA1BA CE Capacitor	304A1117C1220	1	
6	C25,C27	CK2012R1E104K CK Capacitor (CP)	303A6008K2104	2	
7	C33,C40-C43	CK2012B1H103K CK Capacitor (CP)	303A6008K3103	5	
8					
9	C35,C36	CK2012B1H153K CK Capacitor (CK)	303A6008K3135	2	
10	C39,C45	UMA1C470MCA1FA CE Capacitor	304A1117C1470	2	
11	C57	CK2012B1E683K CK Capacitor (CP)	303A6008K2683	1	
12	C70	SME50VB-1-OA CE Capacitor	304A1123H1109	1	
13	C71-C73	UVR2A330MPA CE Capacitor	304A1143A2330	3	
14					
15	CN2	B5B-PH-K-S PC Connector	224A3529P0050	1	
16	CN3	B4B-EH PC Connector	224A3535P0040	1	
17	CN5	DF3A-4P-2DSA PC Connector	224A3840P0040	1	
18					
19	DB1	U1G4B42 Rectifying Diode (CP)	610A1025N0001	1	
20					
21	D5	U1ZB15 Zener Diode	613A2251N0030	1	
22	D6	SS100MA80VSCP Signal Diode	611A0000N0003	1	
23	D14	E-152 Rectifying Diode	611A0037L0011	1	
24	D15	MTZ4.3HJ Zener Diode	613A1391L8090J	1	
25	D17,D18	SS100MA80VKCP Signal Diode	611A0000N0002	2	

TEL-W2F PCB Assy (4UT3528-1035Z0007) (2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	D19	RD20F-B Zener Diode	613A2232L0252	1	
27	D20	MTZ3.6HJ Zener Diode	613A1391L8010	1	
28					
29	IC1	BA6569AFP BIP Linear IC (SO)	720A4029N0012	1	
30					
31	Q1	2SA1491 PNP-HF-TR	600A1226F0018	1	
32	Q2	2SA1384 PNP-HF-TR (CP)	600A1025N0038	1	
33	Q3,Q4	TR100MA50VNCP NPN-HF-TR (CP)	602A1001N0001	2	
34					
35	R19,R22,R36	RM73B2A242F RN Resistor (CP)	323A5003F0242	3	
36	R26,R103,R112,R114	2125JPW Chip Jumper	323A5003P0001	4	
37					
38	R29	RM73B2A132F RN Resistor (CP)	323A5003F0132	1	
39	R32	RM73B2A471F RN Resistor (CP)	323A5003F0471	1	
40	R33	RM73B2A471F RN Resistor (CP)	323A5003F0470	1	
41	R34,R46,R53,R67	RM73B2A102F RN Resistor (CP)	323A5003F0102	4	
42					
43	R35	RM73B2A182F RN Resistor (CP)	323A5003F0182	1	
44	R37,R56	RM73B2A362F RN Resistor (CP)	323A5003F0362	2	
45	R38,R57	RM73B2A432F RN Resistor (CP)	323A5003F0432	2	
46	R41	RM73B2A361F RN Resistor (CP)	323A5003F0361	1	
47	R42	RM73B3A390J RN Resistor (CP)	323A5040J0390	1	
48	R54	RM73B2A302F RN Resistor (CP)	323A5003F0301	1	
49	R55	RM73B2A302F RN Resistor (CP)	323A5003F0302	1	
50	R58	RM73B2A512F RN Resistor (CP)	323A5003F0512	1	
51	R59	RM73B2A562F RN Resistor (CP)	323A5003F0562	1	

TEL-W2F PCB Assy (4UT3528-1035Z0007) (3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R66	RM73B2A622F RN Resistor (CP)	323A5003F0622	1	
53	R68,R71	RM73B2A103F RN Resistor (CP)	323A5003F0103	2	
54	R69	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
55	R72	RD1/4YU10KΩJ RD Resistor (CP)	321A3420J0103	1	
56	R81	RM73B2H510J RN Resistor (CP)	323A5003J0510	1	
57	R82	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	


OKI CONFIDENTIAL
Oki Data Corporation
NTIF Circuit Diagram
3SS5003-6261
CN3
Vcc
Vdd
DPR
P/T
SW2
PB/DP
BZ1
SW1
R10
R11
R12
C4
D5
C5
R9
IC1
TA31075AS
OUT2
OUT1
NPI
NPO
Vcc
LPI
LPO
GND
R8
C3
R7
D4
C2
D3
D2
D1
DB1
R6
R5
R4
C1
CN1
CN2
ON HOOK
R1
R2
R3
SW3
Dip-sw setting table (U.K.)
No. Setting Remarks
1 OFF
2 ON Route change
3 OFF
4 OFF Not used
Dip-sw setting table (Expct U.K.)
No. Setting Remarks
1 ON
2 OFF Route change
3 ON
4 OFF Not used

NTIF PCB Assy (TEL-G1, TEL-I1) (4UT5003-6261Z003) (1/1)

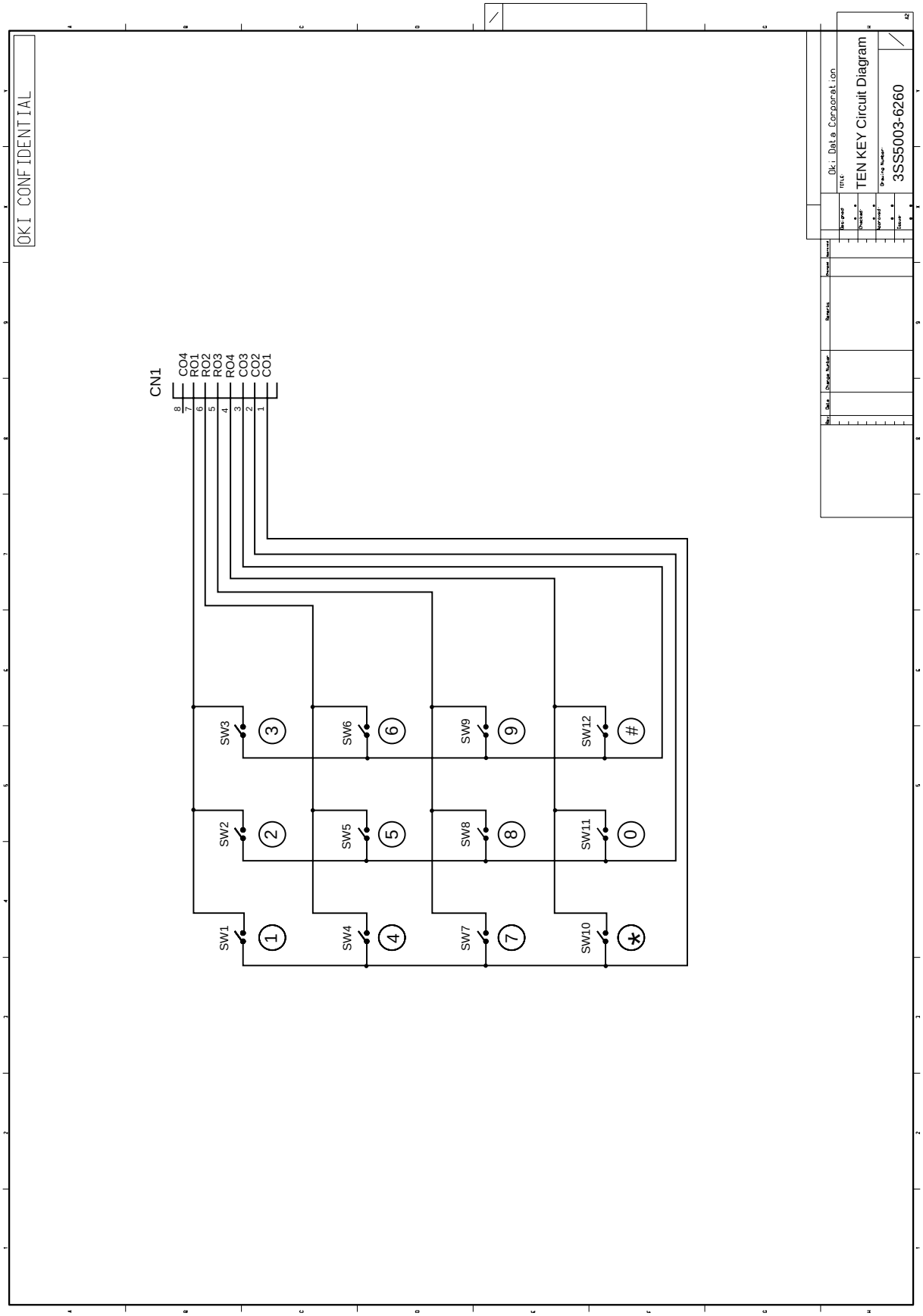
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R1,R3	R20FC02M000 0Ω Resistor	321A3419P0001	2	
2					
3	CN1	B5B-PH-K-S PC Connector	224A3529P0050	1	
4	CN2	B3B-PH-K-S PC Connector	224A3529P0030	1	
5	CN4	TM3RA1-66 Jack	223A3262P0008	1	
6					
7	J1,J2	Tinned Copper Wire	TA-0.65	2	

NTIF PCB Assy (TEL-UK1) (4UT5003-6261Z001) (1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	DB1	S1WBA40 Rectifying Diode	610A1027M0002C	1	
2					
3	D1 - D3	S5688B-TPB5 Rectifying Diode	610A0025M0001	3	
4	D4	RD30E-B Zener Diode	613A1231K0292	1	
5					
6	IC1	TA31075AS BIP Linear IC	720A4025M0009A	1	
7					
8	BZ1	PKM22EPP-4001 Buzzer	550A1067P0251	1	
9					
10	R4,R5	MOR1B20KΩJ RS Resistor	321A1111J0203	2	
11	R7	RNM1/4C2-24KΩJ RN Resistor	323A4024F243	1	
12	R8,R9	RD1/4YU160KΩJ RD Resistor	321A3420J0164	2	
13	R10	RNM1/4C2-1KΩJ RN Resistor	323A4024F0102	1	
14	R11,R12	RNM1/4C2-2KΩJ RN Resistor	323A4024F0202	2	
15					
16	C1	ECQ-E2474KF CF Capacitor 250V 0.47µF	306A2221K5474	1	
17	C2	SME63VB-10-OA CE Capacitor 63V 10µF	304A1123J1100	1	
18	C3	SME50VB-R47-OA CE Capacitor 50V 0.47µF	304A1123H1478	1	
19	C4	C2FEC1H472K-FO CQ-M Capacitor 50V 0.0047µF	306A2026K1472	1	
20	C5	CK92F1H224ZS CK Capacitor 50V 0.22µF	303A4117Z3224	1	
21					
22	SW1	ESD-172312 Slide Switch	203A1128P0201	1	
23	SW2	ESD-172212 Slide Switch	203A1128P0200	1	
24	SW3	BS4-01 DIP Switch	206A1100P0400	1	
25					
26	CN1	B5B-PH-K-S PC Connector	224A3529P0050	1	

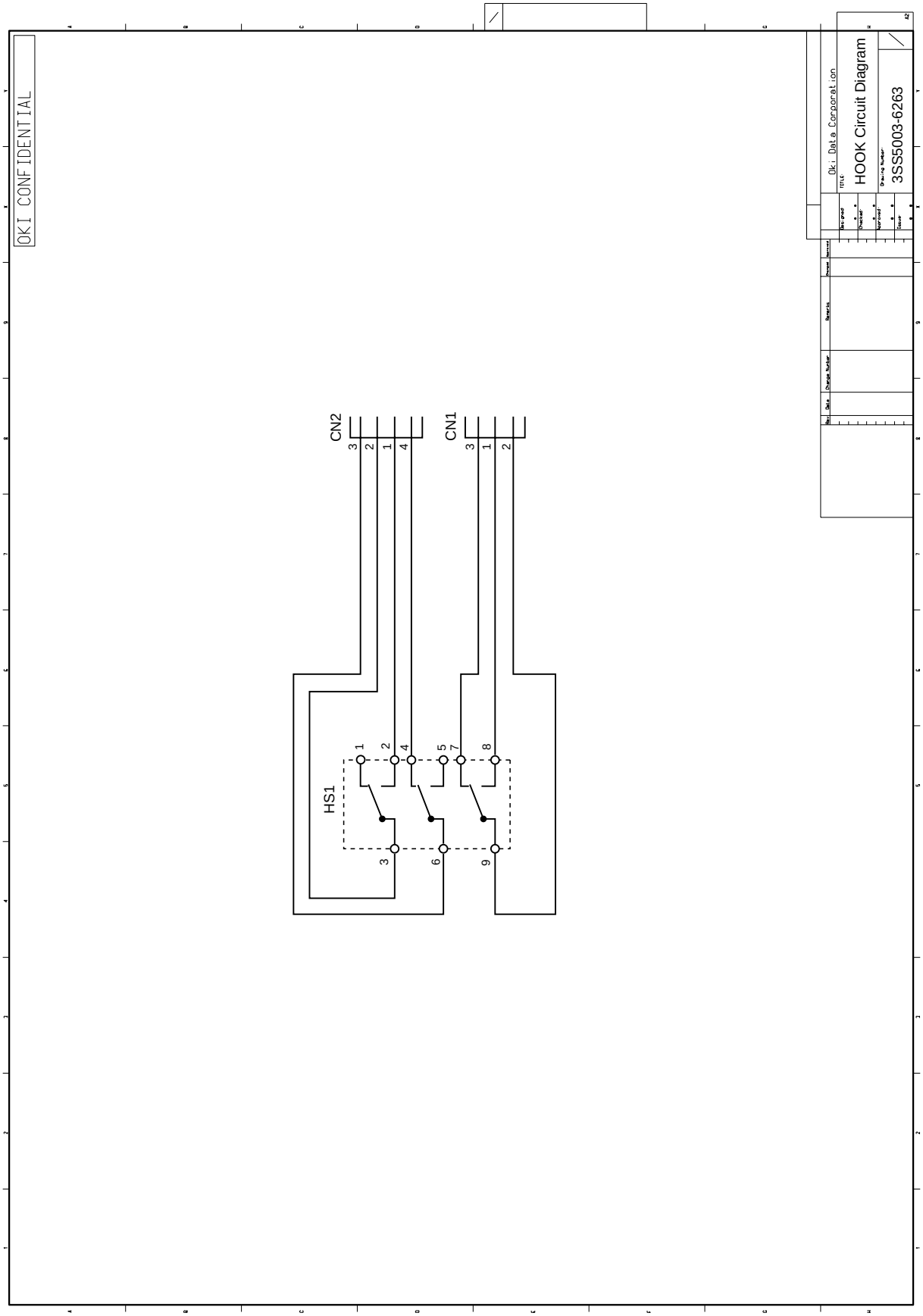
NTIF PCB Assy (TEL-UK1) (4UT5003-6261Z001) (2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
27	CN2	B3B-PH-K-S PC Connector	224A3529P0030	1	
28	CN4	TM3RA1-66 Jack	223A3262P0008	1	
29	CN5	B4B-PH-K-S PC Connector	224A3529P0040	1	
30					
31	J1 - J3	Tinned Copper wire	TA-0.65	0.65 3	


OKI CONFIDENTIAL
CN1
CO4
RO1
RO2
RO3
RO4
CO3
CO2
CO1
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
Oki Data Corporation
TEN KEY Circuit Diagram
3SS5003-6260

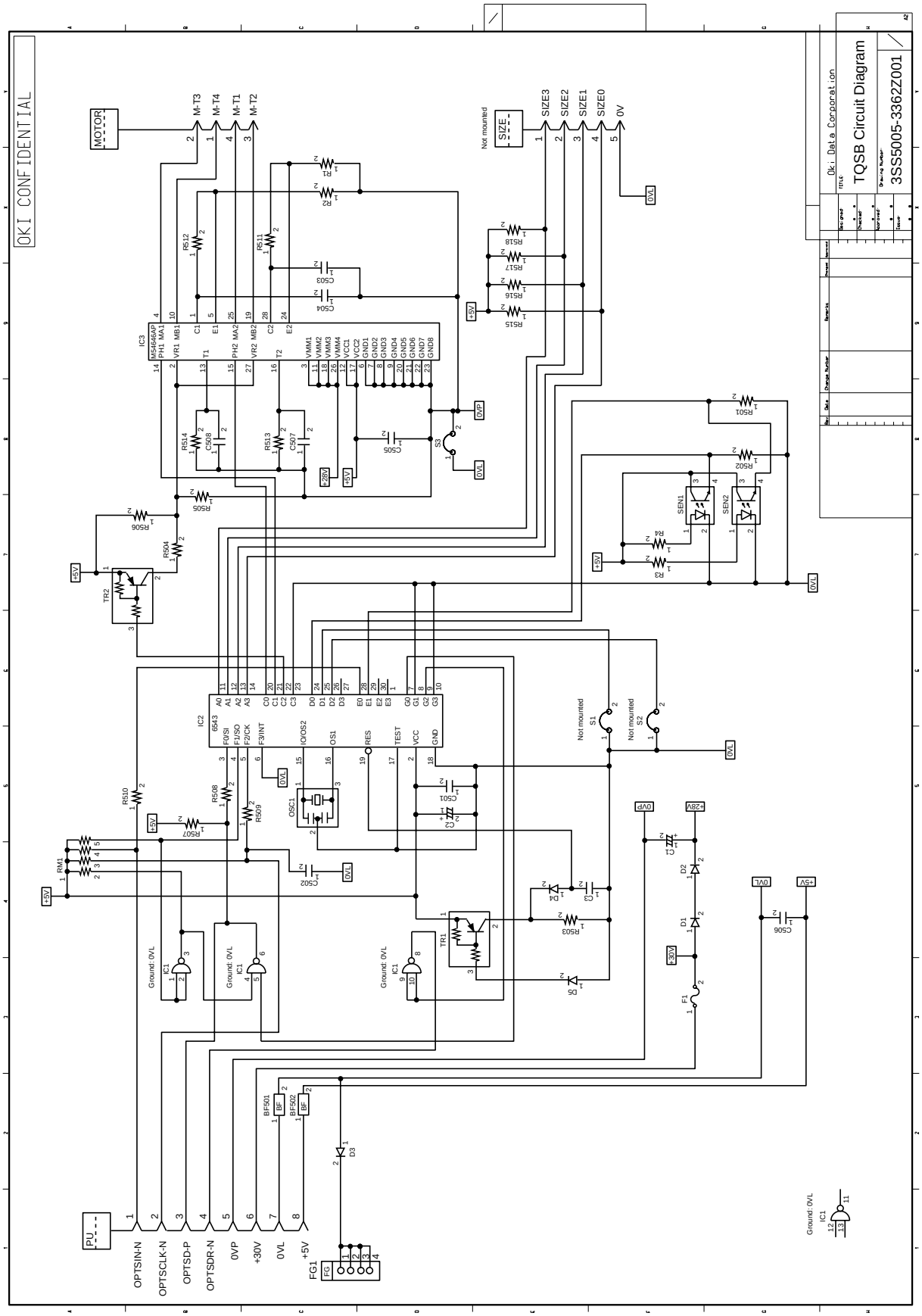
TEN-KEY PCB Assy (4UT5003-6260Z001) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	SW1-SW12	SOR-114HS Push Button Switch	205A1165P1001	1	
2					
3	CN1	S8B-PH-K-S PC Connector	224A3531P0080	1	


OKI CONFIDENTIAL
Oki Data Corporation
HOOK Circuit Diagram
3SS5003-6263
CN2
CN1
HS1

HOOK PCB Assy (4UT5003-6263Z001) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	CN1	S3B-PH-K-S PC Connector	224A3531P0030	1	
2	CN2	S4B-EH PC Connector	224A3534P0040	1	
3					
4	HS1	SPPY43-B-S Hook Switch	218A4021P0002	1	

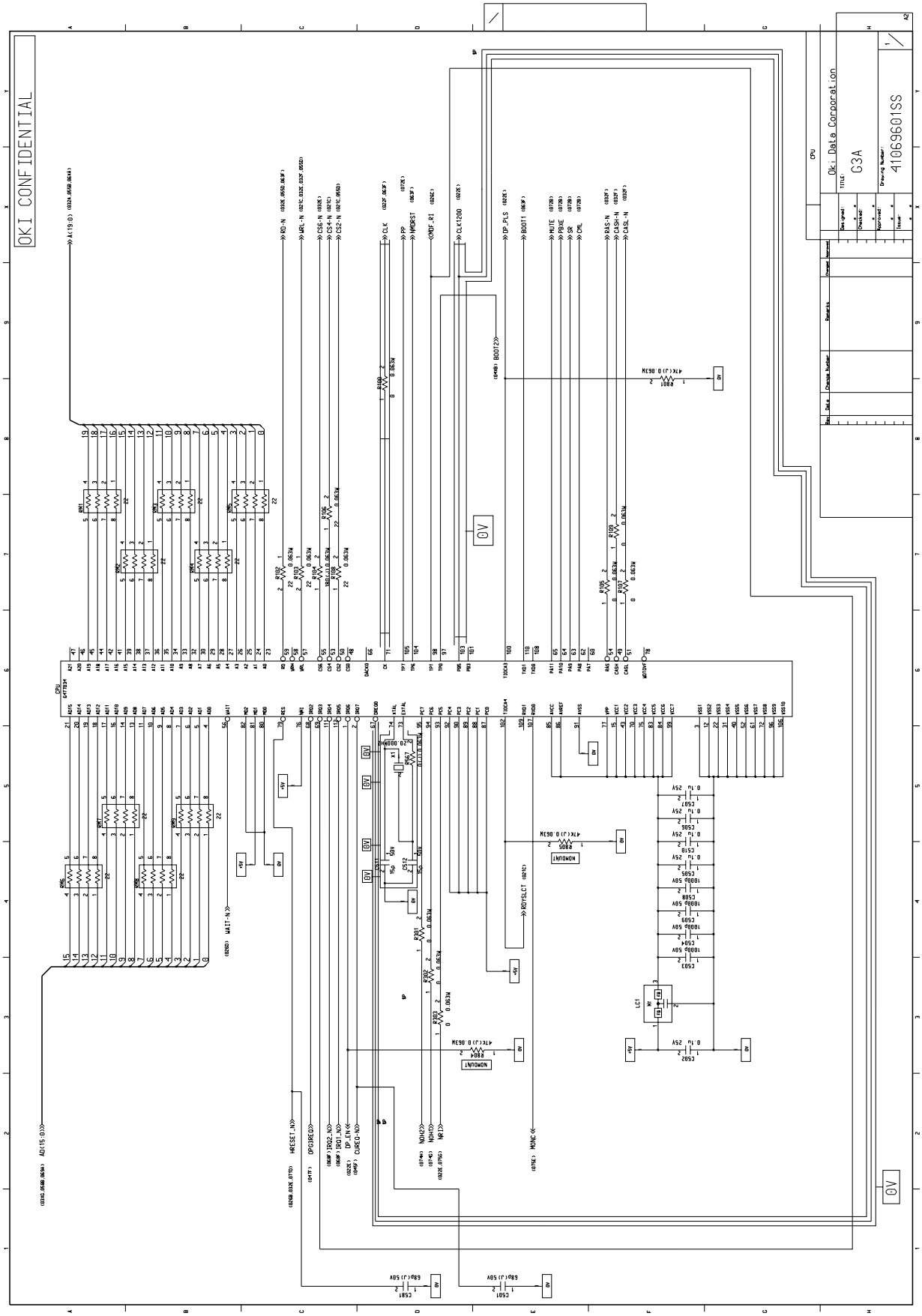

OKI CONFIDENTIAL
Oki Data Corporation
TQSB Circuit Diagram
3SS5005-3362Z001
MOTOR
M-T3
M-T4
M-T1
M-T2
SIZE
SIZE3
SIZE2
SIZE1
SIZE0
0V
Not mounted
IC3
MS48464P
IC2
6543
IC1
TR1
TR2
SEN1
SEN2
S1
S2
S3
RM1
OSC1
PU
OPTSIN-N
OPTSCLK-N
OPTSD-P
OPTSDR-N
0VP
+30V
0VL
+5V
FG1
Ground: 0VL
+28V
+30V
+5V

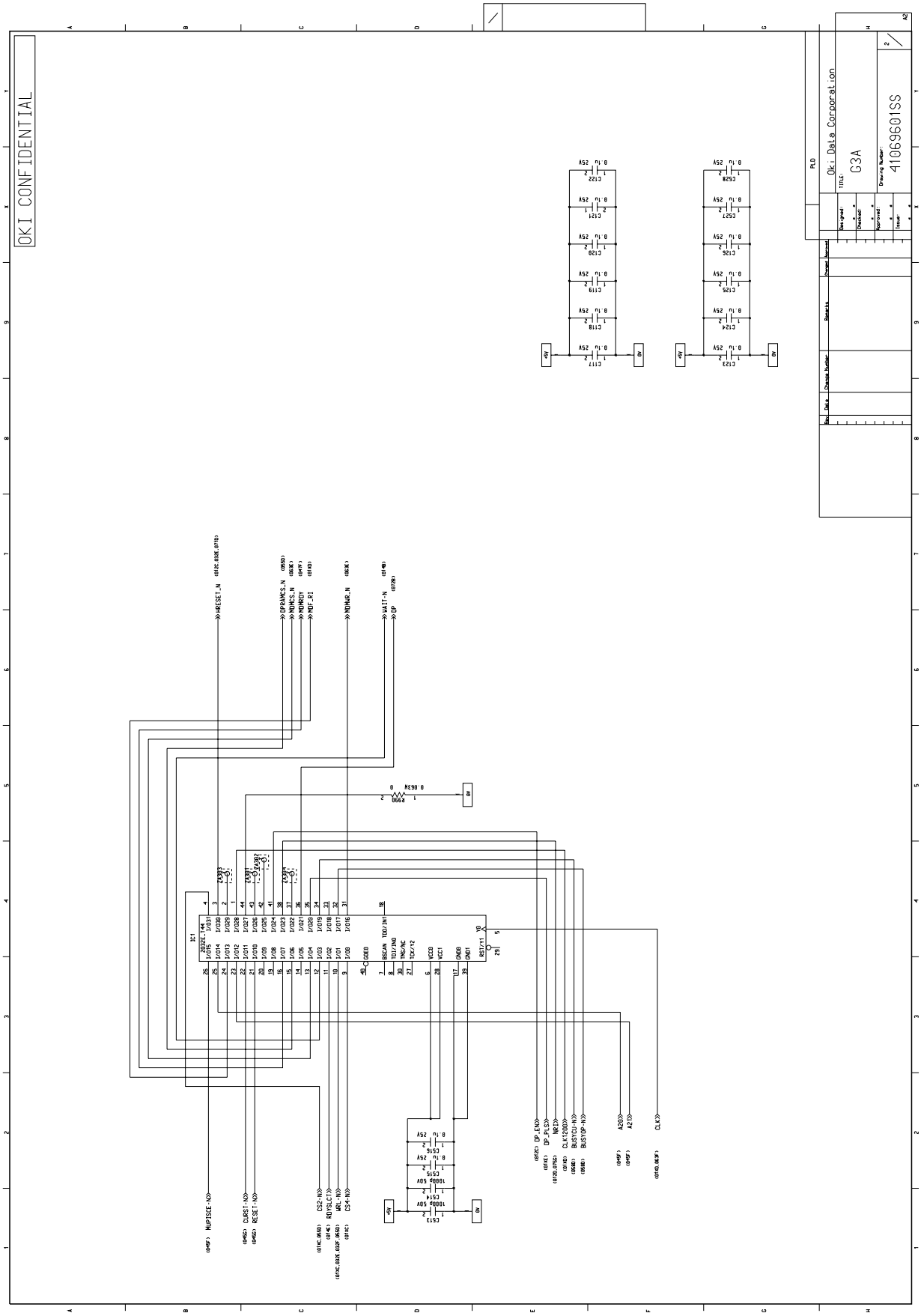
TQSB PCB Assy (4UT5005-3362Z002) (1/2)

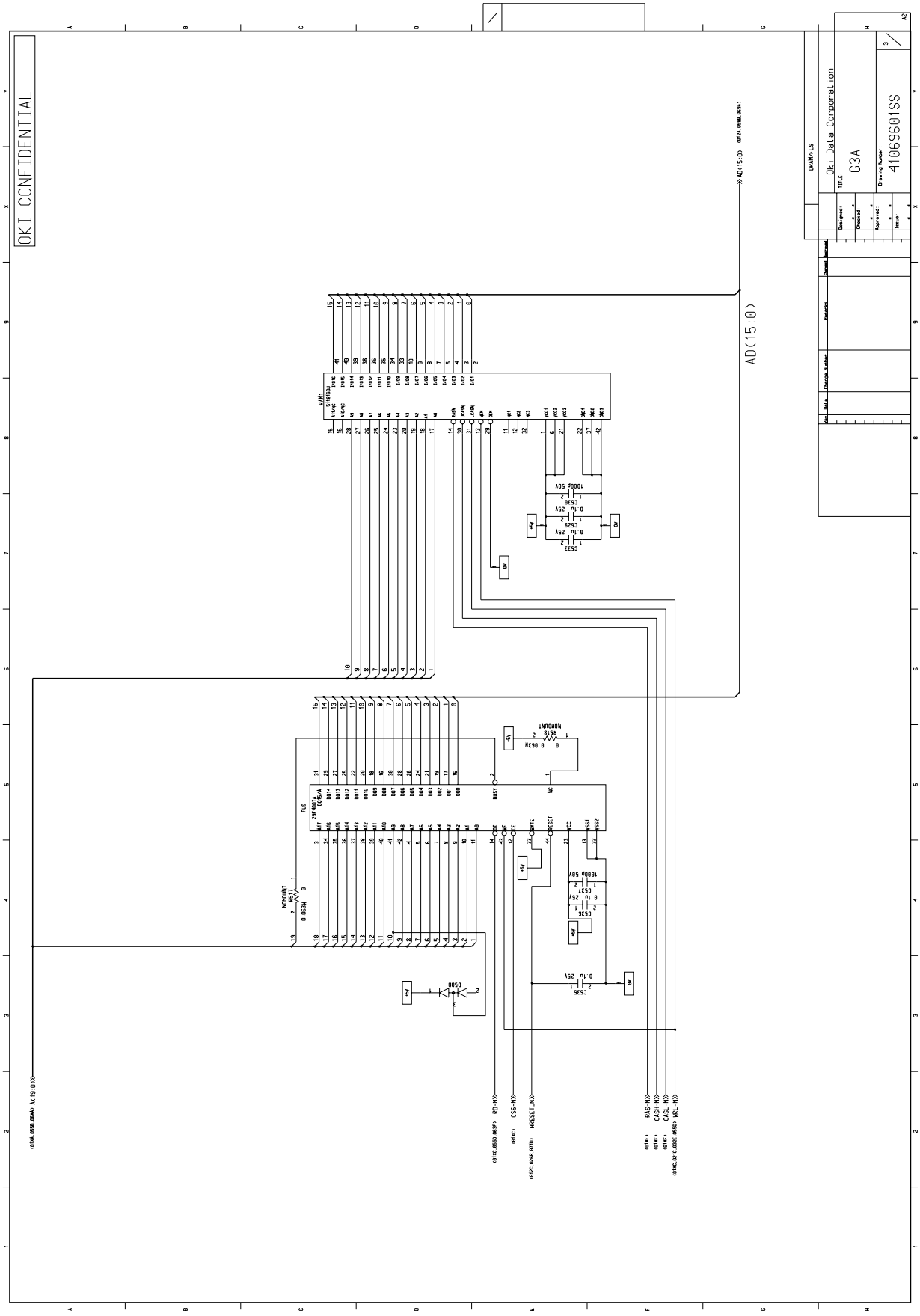
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D1-D3	EM01Z/SM1XN02/DSM1D2 Rectifying Diode	610A0003M0001	3	
2	D5	RD3.9E-B Zener Diode	613A1231L0082	1	
3	D4	1S953/1S2075K/1S2473 Signal Diode	611A0003L0001	1	
4					
5	R513,R514	RM73B2A473J RN Resistor (CP)	323A5003J0473	2	
6	R1,R2	MSF1/2B0.51_J RS Resistor	324A1001J0518	2	
7	R503,R511,R512	RM73B2A102J RN Resistor (CP)	323A5003J0102	3	
8	R3,R4	RD1/4Y180_J RD Resistor	321A1421J0181	2	
9	R501,R502,R508-R510, R515-518	RM73B2A103J RN Resistor (CP)	323A5003J0103	9	
10	R506	RM73B2A123J RN Resistor (CP)	323A5003J0123	1	
11	R505	RM73B2A561J RN Resistor (CP)	323A5003J0561	1	
12	R507	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
13	R504	RM73B2A271J RN Resistor (CP)	323A5003J0271	1	
14					
15	RM1	MRM-4-512JA Block Resistor	334A3266J0512	1	
16					
17	C1	SXE50VB-10-4D-FC CE Capacitor 50V 10µF	304A1008H1100	1	
18	C2	10MS5-33M CE Capacitor 10V 33µF	304A1046A1330	1	
19	C3	RPE122-127E334M50 CKCapacitor 0.33µF	303A4116M3334	1	
20	C503,C504,C507,C508	CK2012B1H102K CK Capacitor (CP) 50V	303A6008K3102	4	
21					
22	C502	CC2012SL1H471J CC Capacitor (CP) 50V	303A3007K0401	1	
23	C501,C505,C506	CK2012F1E104Z CK Capacitor (CP) 25V	303A6008Z2104	3	
24					
25	IC3	M54646AP BIP Linear IC	720A1822M0002	1	

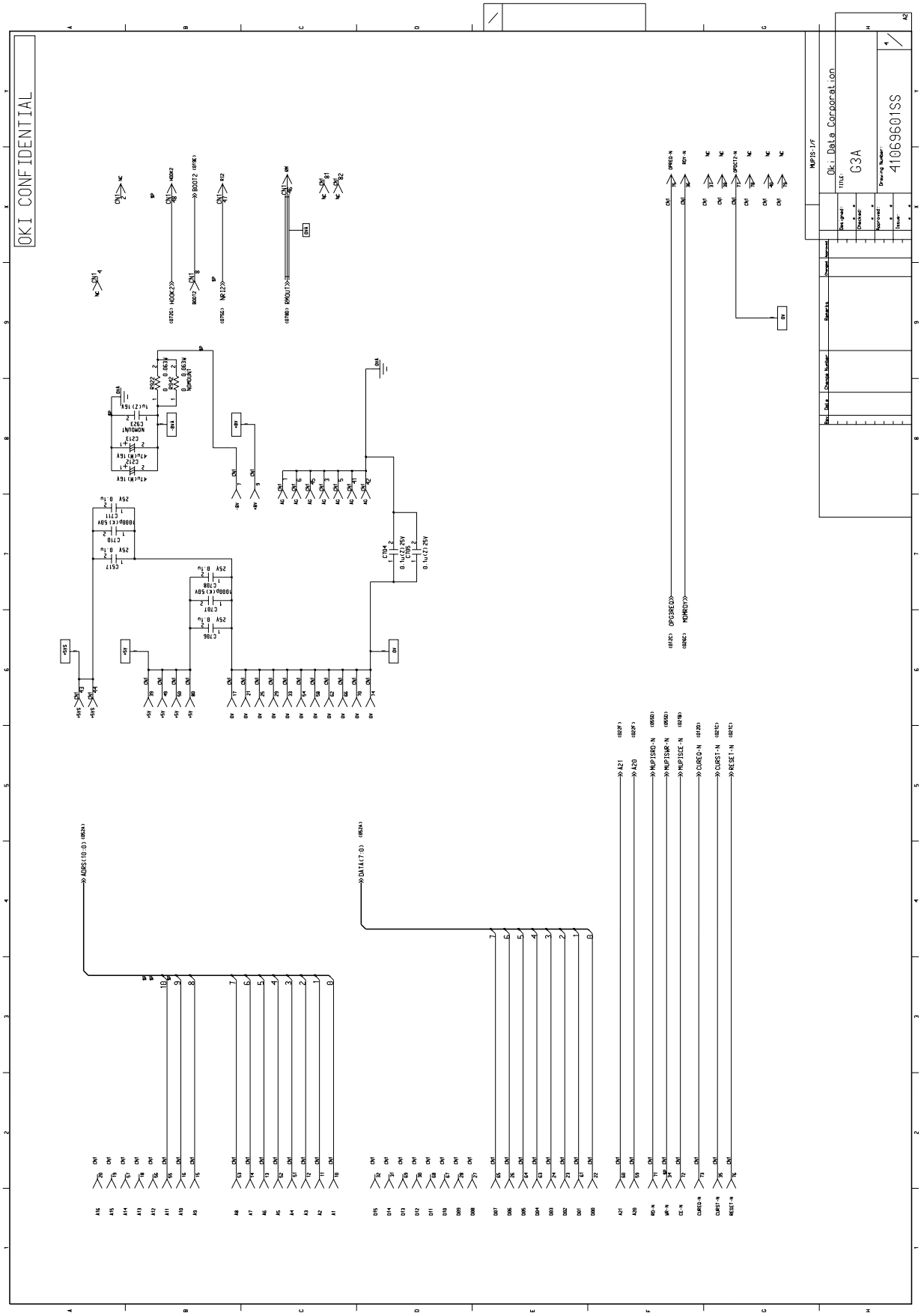
TQSB PCB Assy (4UT5005-3362Z002) (2/2)

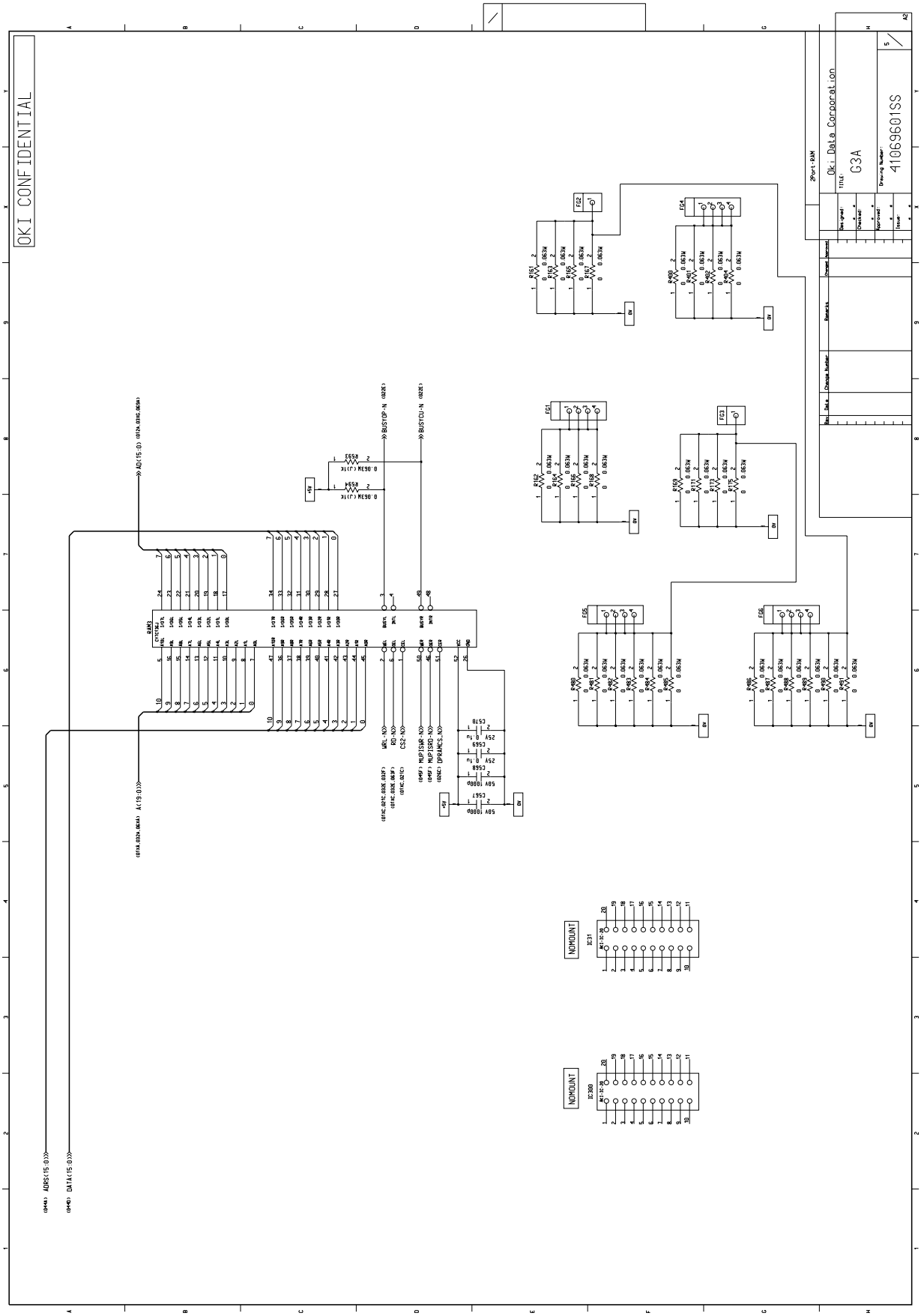
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
26	IC1	74LS38P BIP Digital IC	700A0503M0038	1	
27	IC2	LC6543N-4E07 MOS-CPU (ROM)	853A0036M0003	1	
28					
29	BF501,BF502	CB30-322513 Beads Core	105A5001C1001	2	
30					
31	SEN1,SEN2	SG-206 Photo Coupler	652A0114M0003	2	
32					
33	TR1,TR2	DTA114S PNP-HF-TR	600A1035M0005	2	
34					
35	OSC1	CST4.00MGW Oscillator, Ceramic	381A1025B0002	1	
36					
37	F1	251-001 Fuse	540A2208S1102	1	
38					
39	MOTOR	00-8263-0412-00-000 PC Connector	224A3357P0040	1	
40					
41	PU	1L-S-8P-S2T2-EF PC Connector	224A3052P0080	1	
42					
43	S3	Short Wire (Utype) P=2.5	KH-31036-25	1	

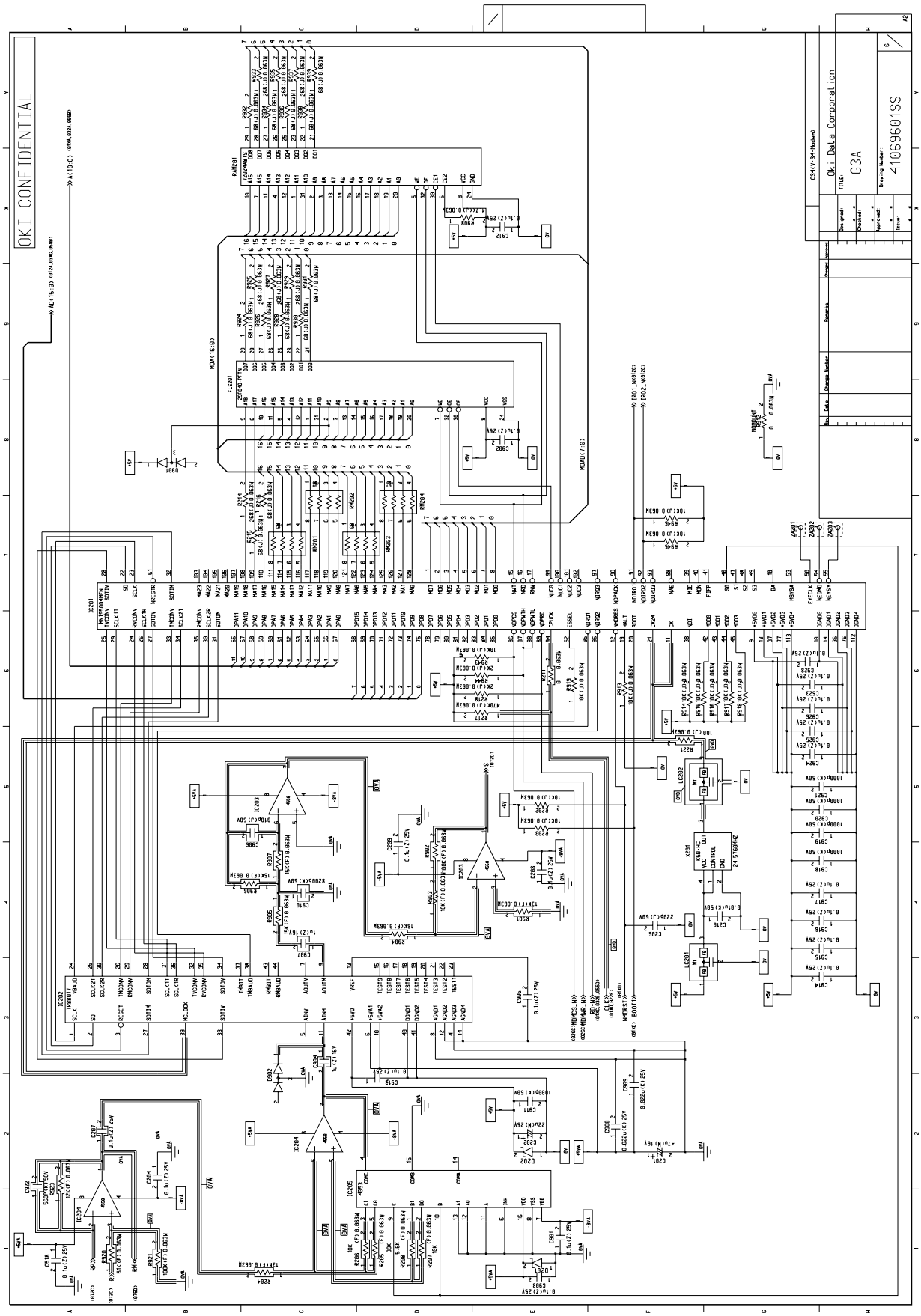

OKI CONFIDENTIAL
Oki Data Corporation
TITLE
G3A
Drawing Number
4106901SS
CPU
0V

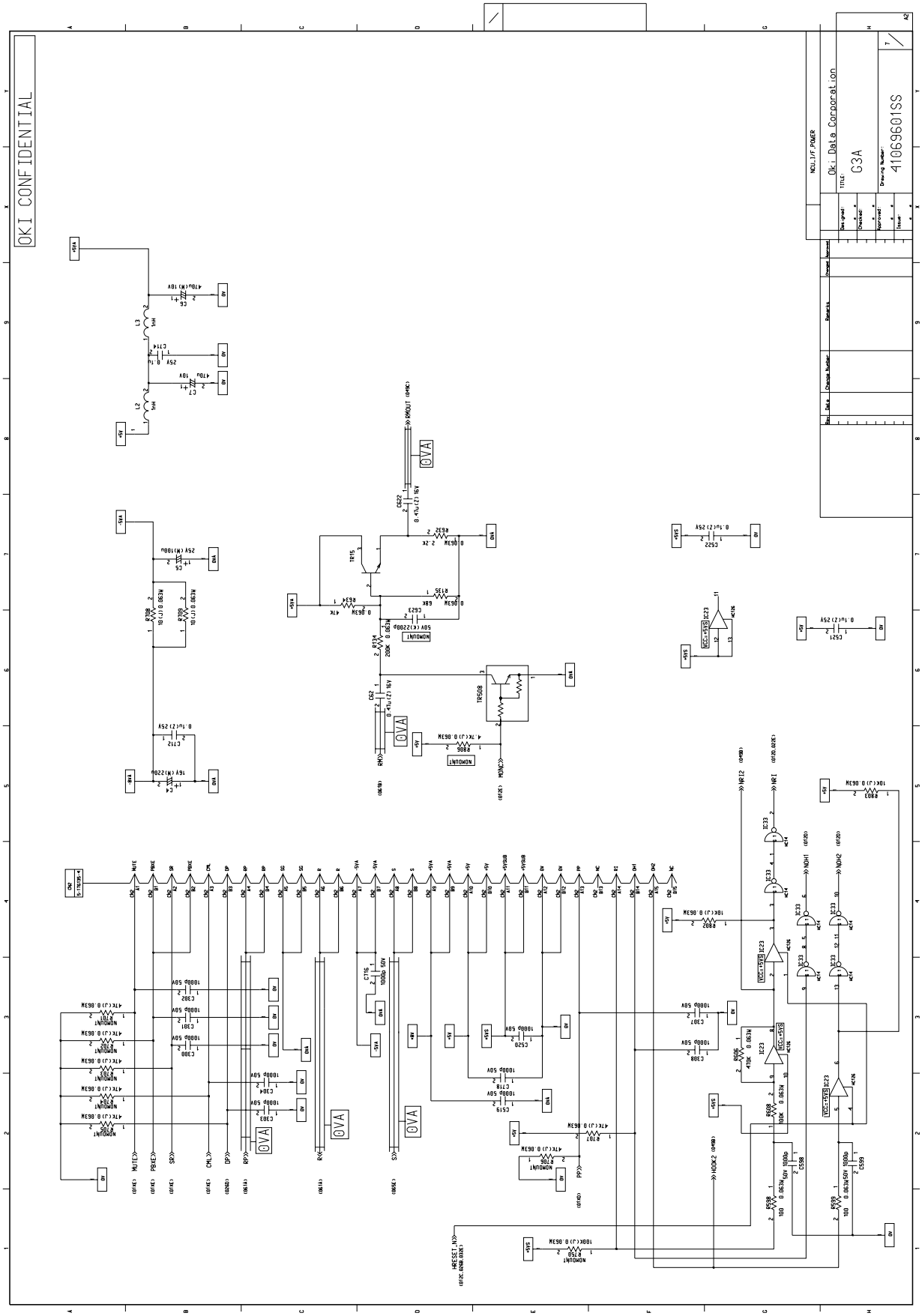

OKI CONFIDENTIAL
Oki Data Corporation
PLD
TITLE:
G3A
Drawing Number:
4106601SS
Issue:
Designed:
Checked:
Approved:
Rev.
Date
Change Number
Remarks
Drawn
Version
A2
2
HRESET_N
DPRAMCS_N
MDWCS_N
MDWRDY
MDF_RI
MDWWR_N
WAIT_N
DP
MUPISCE-N
CURST-N
RESET-N
CS2-N
RDYSLCT
WRL-N
CS4-N
DP_EN
DP_PLS
MAIN
CLK12800
BUSYCH-N
BUSYDP-N
A20
A21
CLK
IC1
CODE0
BSCAN
TDO/INH
TDI/IND
TMS/NC
TCK/Y2
VCC0
VCC1
GND0
GND1
RST/Y1
Y0
0.1u 25V
0.063W
10000p 50V


OKI CONFIDENTIAL
AD(15:0)
Oki Data Corporation
G3A
41069601SS
DRAM/FLS


OKI CONFIDENTIAL
Oki Data Corporation
MJPIS-I/F
G3A
4106601SS


OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
G3A
Drawing Number:
41069601SS
2Port-RAM
NOMOUNT
NOMOUNT


OKI CONFIDENTIAL
Oki Data Corporation
C34(V-34-Modem)
TITLE:
G3A
Drawing Number:
41069601SS
Issue:
Checked
Designed
Date
Change Number
Revised
Remarks
IC201
IC202
IC203
IC204
IC205
RAM201
FLS201
MODA(15:0)
MODAD(7:0)
AD(15:0)
A(19:0)
X201
24.576MHz
+5V
0V
-5V
+3VA
-3VA


OKI CONFIDENTIAL
NCU_I/F_POWER
Oki Data Corporation
TITLE:
G3A
Drawing Number:
41069601SS
Issue:
Approved:
Checked:
Designed:
Remarks
Change Number
Date
Rev
MUTE
PBKE
SR
CML
DP
RP
SS
R
S
MONOUT
MONC
NCR12
NCR1
NCKH1
NCKH2
RESET_N
0VA
NOMOUNT

G3A PCB Assy (41069601BT) (1/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D500,D901	SS100MA80VSCP D-Signal -C	611A0000N0003	2	
2	D902	SB007T03C D-Signal -C	611A0232N0002	1	
3	D201,D202	RD6.8E-B2 D-Zener -	613A1231L0142B	2	4KH-31051-102
4					
5	R206,R207,R903	CR/RK73H/ERJ/MCRF103 RES-MET RN -C	3235003F0103	3	
6	R902,R921	CR/RK73H/ERJ/MCRF104 RES-MET RN -C	3235003F0104	2	
7	R923	CR/RK73H/ERJ/MCRF123 RES-MET RN -C	3235003F0123	1	
8	R204,R901	CR/RK73H/ERJ/MCRF133 RES-MET RN -C	3235003F0133	2	
9	R905-R907	CR/RK73H/ERJ/MCRF153 RES-MET RN -C	3235003F0153	3	
10	R904	CR/RK73H/ERJ/MCRF163 RES-MET RN -C	3235003F0163	1	
11	R205	CR/RK73H/ERJ/MCRF393 RES-MET RN -C	3235003F0393	1	
12	R920	CR/RK73H/ERJ/MCRF513 RES-MET RN -C	3235003F0513	1	
13	R208	CR/RK73H/ERJ/MCRF562 RES-MET RN -C	3235003F0562	1	
14	R708,R709	CR/RK73K/ERJ/MCRJ100 RES-MET RN -C	3235003J0100	2	
15	R221,R598,R599	CR/RK73K/ERJ/MCRJ101 RES-MET RN -C	3235003J0101	3	
16	R593,R594	CR/RK73K/ERJ/MCRJ102 RES-MET RN -C	3235003J0102	2	
17	R202,R203,R801-R803, R913-R919,R943,R945, R946,R954	CR/RK73K/ERJ/MCRJ103 RES-MET RN -C	3235003J0103	15	
18	R608	CR/RK73K/ERJ/MCRJ104 RES-MET RN -C	3235003J0104	1	
19	R104	CR/RK73K/ERJ/MCRJ181 RES-MET RN -C	3235003J0181	1	
20	R218,R944	CR/RK73K/ERJ/MCRJ202 RES-MET RN -C	3235003J0202	2	
21	R134	CR/RK73K/ERJ/MCRJ204 RES-MET RN -C	3235003J0204	1	
22	R102,R103,R106,R108	CR/RK73K/ERJ/MCRJ220 RES-MET RN -C	3235003J0220	4	
23	R632	CR/RK73K/ERJ/MCRJ222 RES-MET RN -C	3235003J0222	1	
24	R908	CR/RK73K/ERJ/MCRJ472 RES-MET RN -C	3235003J0472	1	

G3A PCB Assy (41069601BT) (2/4)

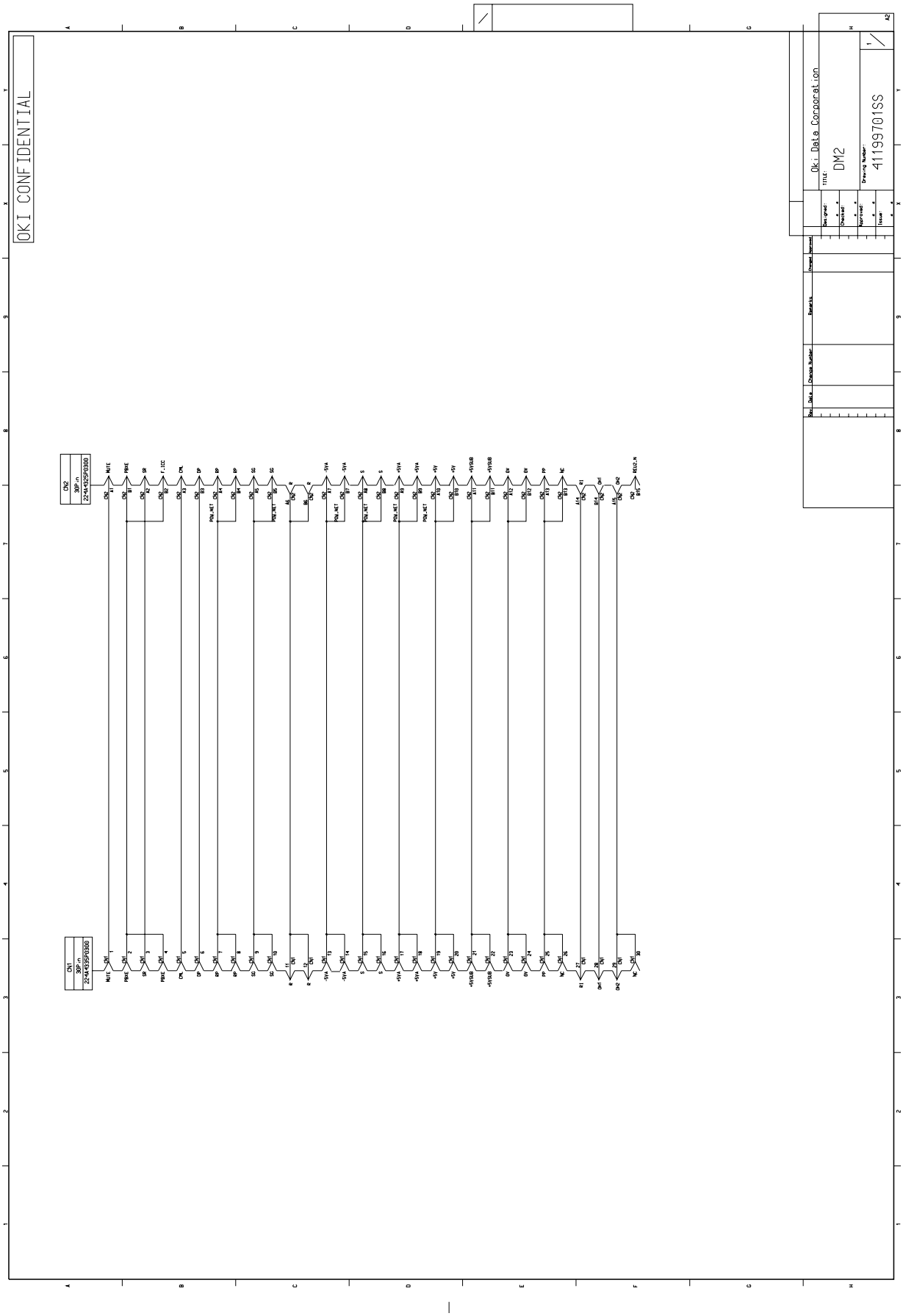
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
25	R634,R707	CR/RK73K/ERJ/MCRJ473 RES-MET RN -C	3235003J0473	2	
26	R217,R606	CR/RK73K/ERJ/MCRJ474 RES-MET RN -C	3235003J0474	2	
27	R214-R216,R924-R939	CR/RK73K/ERJ/MCRJ680 RES-MET RN -C	3235003J0680	19	
28	R135	CR/RK73K/ERJ/MCRJ683 RES-MET RN -C	3235003J0683	1	
29	R100,R105,R107,R109, R161-R169,R171,R173, R175,R211,R301-R303, R400-R402,R404,R480- R491,R567,R922,R990	CR/RK73Z/ERJ/MCRJ-0V RES-ZeroΩ -C	3255003P0001	39	
30					
31	RM1-RM9	CN1J4/EXBV8V22ΩJ RES-Block -C	3345003J0220	9	
32	RM201-RM204	CN1J4/EXBV8V68ΩJ RES-Block -C	3345003J0680	4	
33					
34	C511,C512	GRM/UMK/MCH/150CH CAP-Ceramic -C	3033003C0150	2	
35	C206	GRM/UMK/MCH/221CH CAP-Ceramic -C	3033003C0221	1	
36	C501,C581	GRM/UMK/MCH/680CH CAP-Ceramic -C	3033003C0680	2	
37	C906	UMK107CH911JZ-T 50V CAP-Ceramic -C	3033005C0911	1	
38	C300-C304,C307,C308, C503,C504,C508,C509, C513,C514,C519,C520, C530,C537,C567,C568, C598,C599,C707,C710, C716,C718,C911,C918- C921	GRM/UMK/MCH/ 102B CAP-Ceramic -C	3036003K0102	30	
39	C210	GRM/UMK/MCH/ 103B CAP-Ceramic -C	3036003K0103	1	
40	C908,C909	GRM/TMK/MCH/223B 25V CAP-Ceramic -C	3036003K0223	2	
41	C922	GRM/UMK/MCH/561B 50V CAP-Ceramic -C	3036003K0561	1	
42	C910	GRM/UMK/MCH/ 822B CAP-Ceramic -C	3036003K0822	1	
43	C117-C126,C204,C207- C209,C502,C505-C507, C510,C515-C518,C521- C523,C527-C529,C533, C535,C536,C569,C570, C704-C706,C708,C711, C712,C714,C901-C903, C905,C912-C917,C924- C926,C928	GRM/TMK/MCH/104Z 25V CAP-Ceramic -C	3036003Z0104	55	
44	C62,C622	EMK107F474ZA-T 16V CAP-Ceramic -C	3036005Z0474	2	

G3A PCB Assy (41069601BT) (3/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
45	C904,C907	CK2012F1C105Z 16V CAP-Ceramic -C 1µF	303A6008Z1105	2	
46	C5	KME25VB-100-OA 25V CAP-Alum(CE) -	304A1039E1101	1	
48	C201,C212,C213	16MS5-47M 16V CAP-Alum(CE) -47µF	304A1046C1470	3	
49	C202	25MS5-22M 25V CAP-Alum(CE) - 22µF	304A1046E1220	1	
50	C6,C7	KMG10VB-470M-FC 10V CAP-Alum(CE) -	304A1180A1471	2	
51	C4	KMG16VB-220M-FC 16V CAP-Alum(CE) -	304A1180C1221	1	
52					
53	IC1	LSI2032E-110LT44-D02 Memory-PLA -F	8180338N0002	1	
53	IC33	74HC14FP Digital IC-MOS-S	702A1703N0014	1	
54	IC23	74HC126FP Digital IC-MOS-S	702A1703N0126	1	
55	IC203,IC204	NJM4558M Analog-BIPLIN -S	720A0028N0039	2	
56	IC205	BU4053BCF Analog-MOS SW -S	731A0029N0002	1	
57	IC202	TR88017/TR88017S Analog-MOSdata-F	7320003N0001	1	
58	IC201	MN195004MFN1 Analog-MOSdata-F	7320027N0001	1	
59	CPU	HD6437034AE36F CPU-MOS (ROM) -F	8530432N0007	1	
60					
61	RAM1	OR-Memory-MOSDRAM-S	41087601	1	
62	RAM201	8128-15TS Memory-MOSSRAM-S	8040003N0601	1	
63	RAM3	71321LA55J Memory-MOSSRAM-L	8040003N4301	1	
64					
65	FLS	FLASH MEM.IC	41317201	1	
66	FLS201	FLASH MEMORY IC(FLS201)	40820901	1	
67					
68	LC202	MT-SL330KB COMP PAR-LC -	342A1013K0330	1	
69	LC1,LC201	MT-Y223NB COMP PAR-LC -	342A1013N0223	2	
70	L2,L3	LHL10-102J Coil-HF -	353A1013J0102	2	
71					
72	TR15	2SC2712-Y/G TR-NPN/H-FREQ -C	602A1025M0033	1	

G3A PCB Assy (41069601BT) (4/4)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
73	TR508	DTC123YK TR-NPN/H-FREQ -C	602A1035N0019	1	
74					
75	CN1	TX24-80R-6ST-H1 Connector-PCB -	2244111P0800	1	
76	CN2	5-176135-4 Connector-PCB -	224A4325P0300	1	
77					
78	X1	HC-49/U03C-20.00MHz OSC-Crystal -C	3801001B0003	1	4LH-31223-2
79	X201	K50HC0-CSE24.576MHzR OSC-Crystal -C	3846000B0001	1	

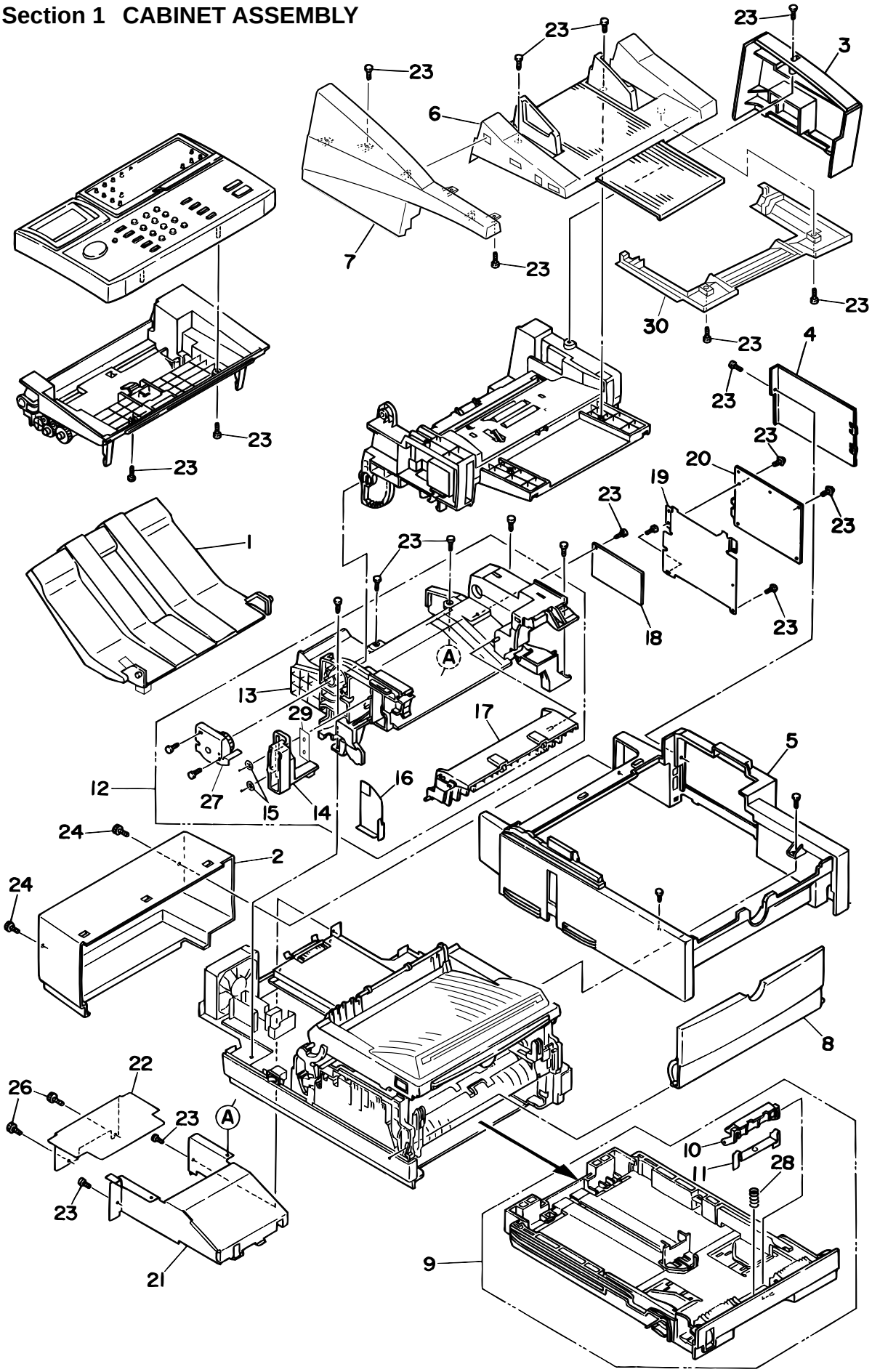

OKI CONFIDENTIAL
Oki Data Corporation
TITLE:
DM2
Drawing Number:
41199701SS
Issue:
Designed:
Checked:
Approved:
Date
Change Number
Remarks
Drawn
Checked
Approved
Issued
CN1
30P/n
22-04-5305080
CN2
30P/n
22-04-5305080

DM2 PCB Assy (41199701BT) (1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	CN1	224A4335P0300	1-176837-4 Connector-PCB -	1	
2	CN2	224A4325P0300	5-176135-4 Connector-PCB -	1	

Appendix D MECHANICAL EXPANDED VIEW DRAWING AND PARTS LIST

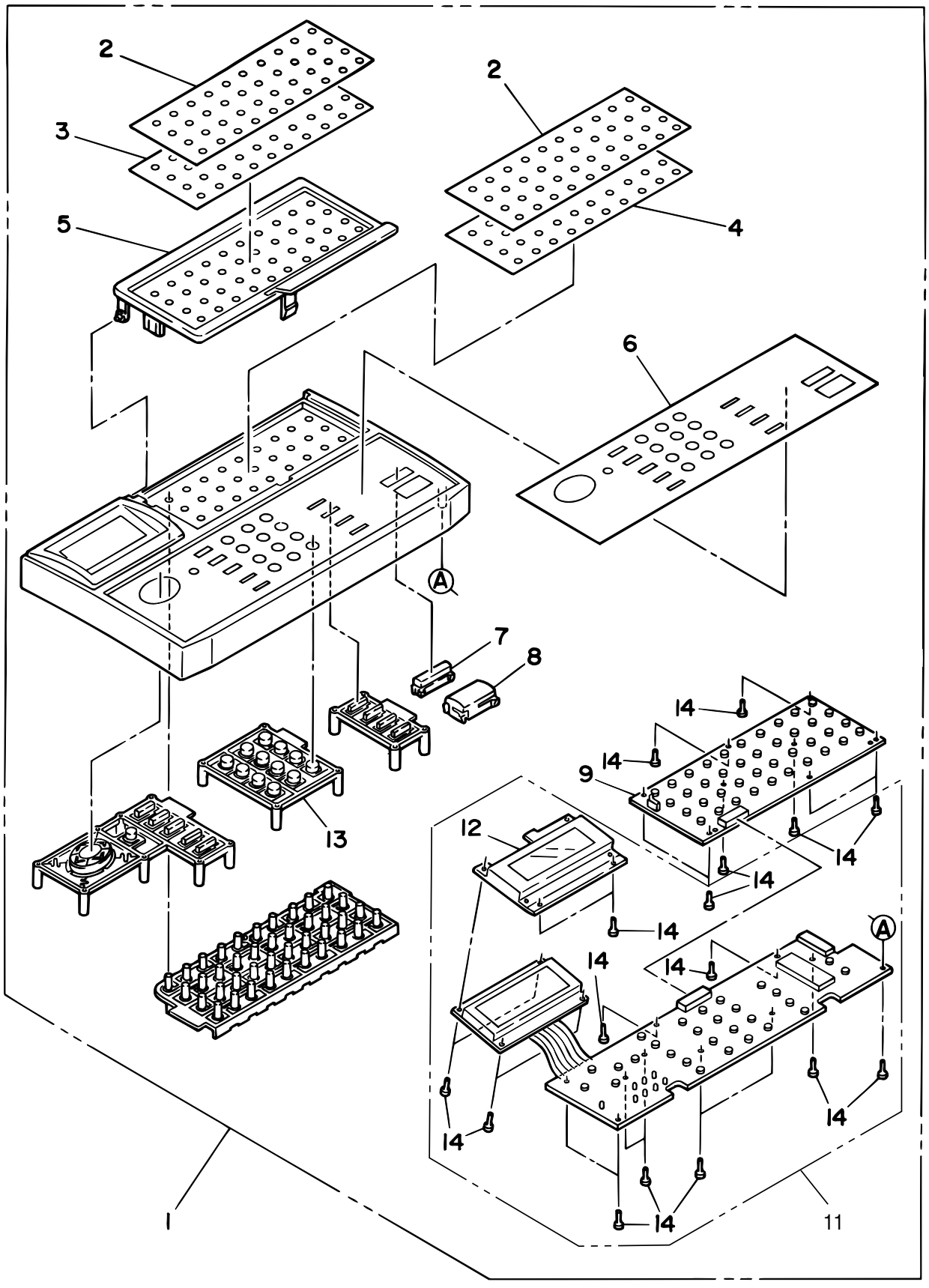
Section 1 CABINET ASSEMBLY



Section 1 CABINET ASSEMBLY

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1	41333201	Stacker Assy.-Document 056/176	1	
	2	40729501	Cover-Rear	1	OKI
	3	40762001	Cover-Side (R)	1	OKI
	4	40729401	Cover-NCU	1	OKI
	5	40729301	Cover-Main	1	OKI
	6	41809001	Cover Assy. -Document Table	1	OKI
	7	41809201	Cover-Side (L)	1	OKI
	8	40715501	MANUAL FEED Assy	1	OKI
	9	40473001	Cassette Assy. -Paper	1	OKI
	10	3PP4083-5663G001	SEPARATION FRAME ASSEMBLY	1	
	11	40093801	Spring-Damper-Assy.	1	
	12	40802601	Frame Assy. -Stacker (FU)	1	
	13	40729601	Frame-Stacker (FU)	1	
	14	40729701	Lever-Change (PS)	1	
	15	4PB4013-3501P003	CS-RING (CS4-SUS)	2	
	16	40955801	Plate Assy. -Shield (PSU)	1	
	17	40802501	Guide Assy. -Paper (FD)	1	
	18	41813701	Board-J34	1	
	19	40730101	Plate-Shield (NCU)	1	
	20a	40044503	Board-UNC	1	ODA
	20b	40044307	Board-WN5	1	AUS
	20c	40044305	Board-WN5	1	OKI-INT
	20d	41777401	Board-TBO	1	OEL
	21	40730301	Plate-PKG	1	
	22	40945401	Plate Assy. -Rear	1	
	23		B SCREW B	1	
	24		Screw	1	
	25		TAPPING SCREW B1	1	
	26		Screw	1	
	27	40741001	Limiter-2way (F)	1	
	28	4PP4083-7728P001	SEPARATION SPRING A	1	
	29	41087801	Film-Spacer-PS	1	
	30	41809301	Cover-Blind	1	

Section 2 CONTROL PANEL ASSEMBLY



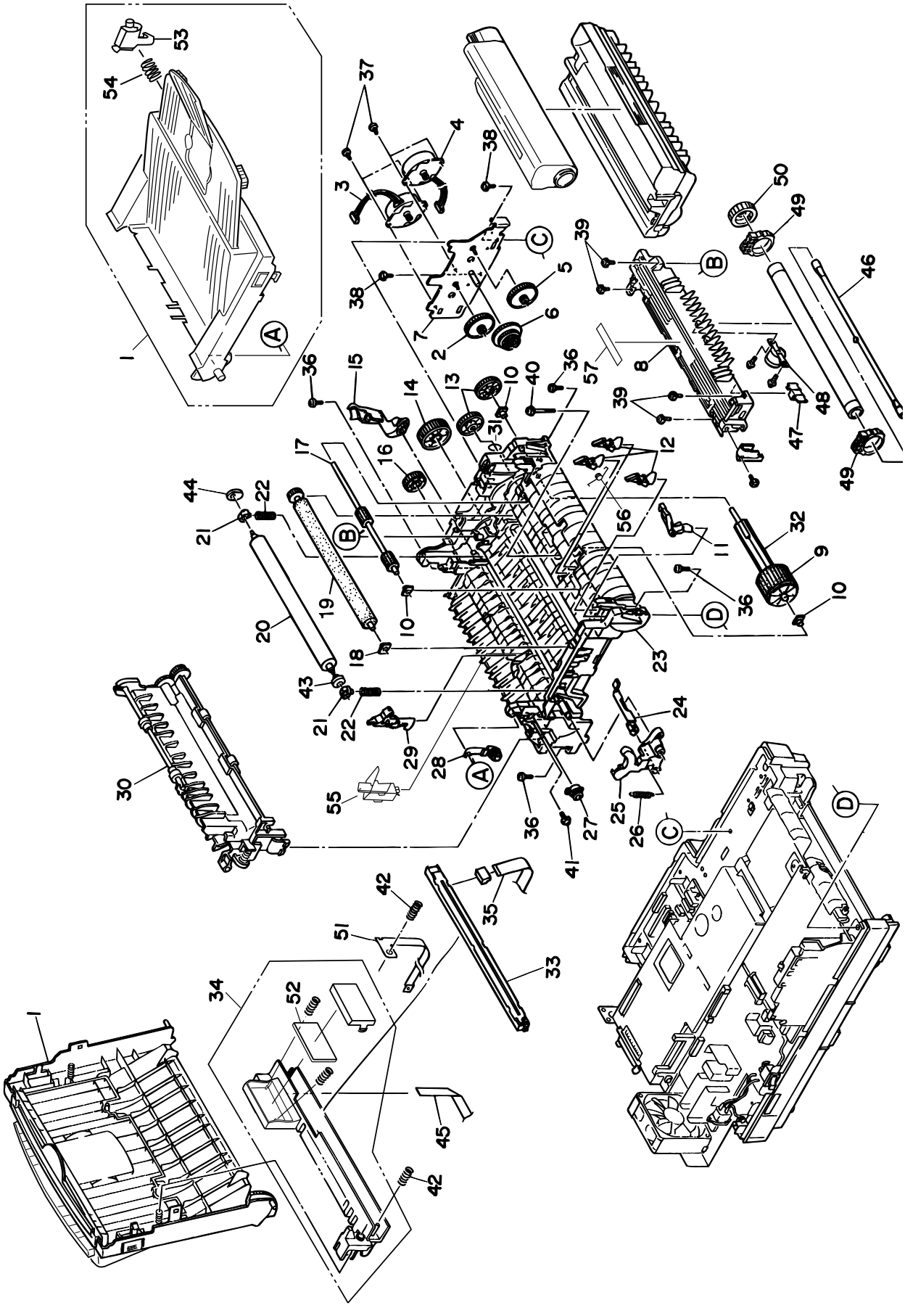
Section 2 CONTROL PANEL ASSEMBLY

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1a	40802901	OP Panel Assy. -FX056/176	1	OKIFAX 5700/5750/5780 OEL Note 1
	1b	40802916	OP Panel Assy. -FX056/176	1	OKIFAX 5780 ODA/OKI-INT/AUS
	1c	40802917	OP Panel Assy. -FX056/176	1	OKIFAX 5980 ODA/OKI-INT/AUS
	1d	40802912	OP Panel Assy. -FX056/176	1	OKIFAX 5900/5950/5980 OEL Note 1
	2	40733401	Film-Onetouch	1	
	3a	40733309	Sheet-Onetouch	1	
	3b	40733311	Sheet-Onetouch	1	OKIFAX 5780/5980 GER Note 2
	4a	40733310	Sheet-Onetouch	1	Except OKIFAX 5780
	4b	40733312	Sheet-Onetouch	1	OKIFAX 5980 GER Note 2
	5a	40919601	Cover-Onetouch056	1	OKIFAX 5700/5750/5780
	5b	40732401	Cover-Onetouch	1	OKIFAX 5900/5950/5980
	6a	40733215	Sheet-Function	1	OKIFAX 5780 OEL/ODA/OKI-INT
	6b	40733217	Sheet-Function	1	OKIFAX 5780 GER Note 2
	6c	40733216	Sheet-Function	1	OKIFAX 5980 OEL/ODA/OKI-INT
	6d	40733218	Sheet-Function	1	OKIFAX 5980 GER Note 2
	7a	40732601	Button-Start	1	OKI
	7b	40732602	Button-Start	1	LANIER
	8a	40732701	Button-Stop	1	OKI
	8b	40732702	Button-Stop	1	LANIER
	9	40807101	Board-P77	1	
	11	40807001	Board Assy.-P76	1	
	12	40733101	Holder-LCD	1	
	13	40732801	Button-TenKey	1	OKI
	14		B SCREW A		

Note 1: Not included items 6, 7, 8 for OEL version.

Note 2: Parts will be supported by OEL.

Section 3 PRINTER ASSEMBLY



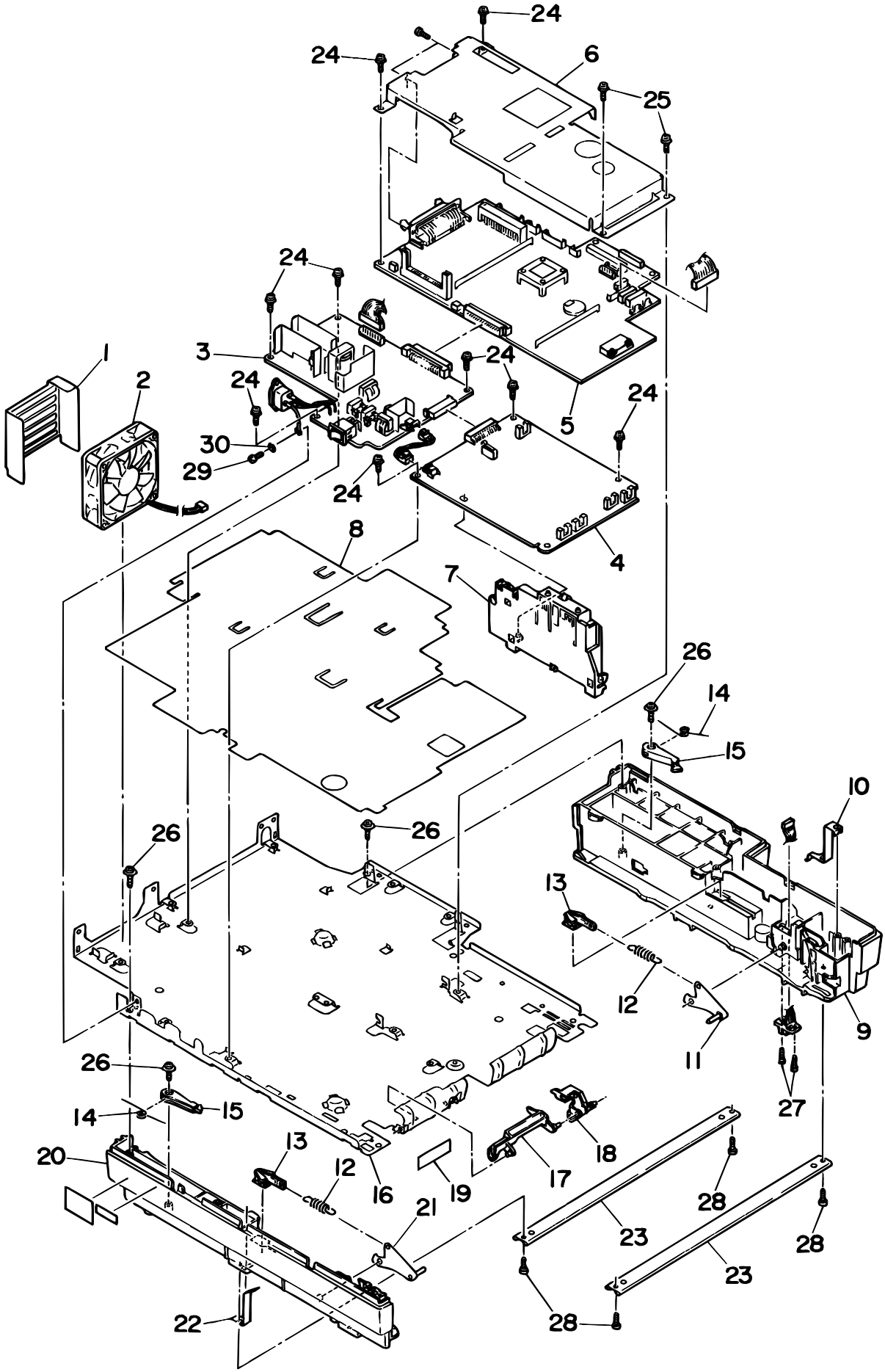
Section 3 PRINTER ASSEMBLY 1/2

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1	41919201	Stacker-Assy. -176V	1	
	2	40778101	Gear-Idle A (Z60/16)	1	
	3	40229001	Motor-Pulse (Main)	1	
	4	40396201	Motor-Pulse (Regist)	1	
	5	40295101	Gear-Idle B (Z60/16)	1	
	6	41224701	REDUCTION GEAR	1	
	7	40294801	Bracket-Motor (Caulking)	1	
	8a	40625702	Heat Assy. -176	1	120V, ODA
	8b	40625703	Heat Assy. -176	1	230V, Except ODA
	9	4PB4122-1280P001	Rubber-Hopping Roler	1	
	10	4PP4083-6022P002	Bearing A	3	
	11	4PP4083-6086G001	TONER SENSOR ASSEMBLY	1	
	12	4PP4083-6083P001	SENSOR PLATE (IN)	3	
	13	4PB4083-6024P001	ONE-WAY CLUTCH GEAR	2	
	14	4PP4083-6080P001	IDLE GEAR B	1	
	15	3PP4083-6054P001	RESET LEVER R	1	
	16	4PP4083-6081P001	IDLE GEAR C	1	
	17	40740601	Roller-Registration	1	
	18	40438001	Bearing-TR	1	
	19	40437801	Roller-Transfer-B Assy	1	
	20	3PB4083-6064P002	Roller-Back up	1	
	21	4PP4083-6052P001	BUSH A	2	
	22	4PP4083-7620P001	BIAS SPRING C	2	
	23	40771201	Frame-Lower Subassembly	1	
	24	3PP4083-6058P001	SWITCH ARM LEVER	1	
	25	3PP4083-6053P001	RESET LEVER L	1	
	26	4PP4083-6057P001	RESET SPRING	1	
	27	4PB4083-6197P001	DAMPER FRAME	1	
	28	4PP4083-6191G001	DAMPER ARM ASSEMBLY	1	
	29	40771401	Lever-Eject Sensor Assembly	1	
	30	40796201	Guide Assy.-Eject	1	
	31	4PP4083-6031P001	BEARING R	1	
	32	3PP4083-6020P001	HOPPING ROLLER SHAFT	1	
	33	40521201	LED Head Unit-51K	1	
	34	40949602	Holder Assy. -TLK	1	
	35	40241703	Cord-LED Assembly	1	
	36		Screw	4	

Section 3 PRINTER ASSEMBLY 2/2

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	37		S SCREW B	4	
	38		S SCREW C	1	
	39		TAPPING SCREW B1	4	
	40		CUP SCREW C	1	
	41		TAPPING SCREW B2	1	
	42	40640801	Spring-Head	2	
	43	4PP4120-1209P001	WASHER B	1	
	44	4PP4120-1210P001	WASHER C	1	
	45	2381014P0001	SMCD7X320BDX10/6 (BL) CONN PAR-	1	
	46a	41043501	LAMP-HAROGEN (Q) _176	1	120V, ODA
	46b	41043502	LAMP-HAROGEN (Q) _176	1	230V, Except ODA
	47	4PB4083-6106P001	HEAT SENSOR	1	
	48	4PB4083-6293P001	THERMOSTAT A	1	
	49	4PB4083-6128P001	BEARING B	2	
	50	4PP4083-6113P001	GEAR A	1	
	51	40891301	Film-FG (FAX)	1	
	52	41286801	Board-DLK	1	
	53	3PP4128-1140P002	Stacker Cover Holder	2	
	54	40892401	Spring Knob	2	
	55	41027701	Sensor Wire Assembly	1	
	56	41415801	Spring-Write Sensor	1	

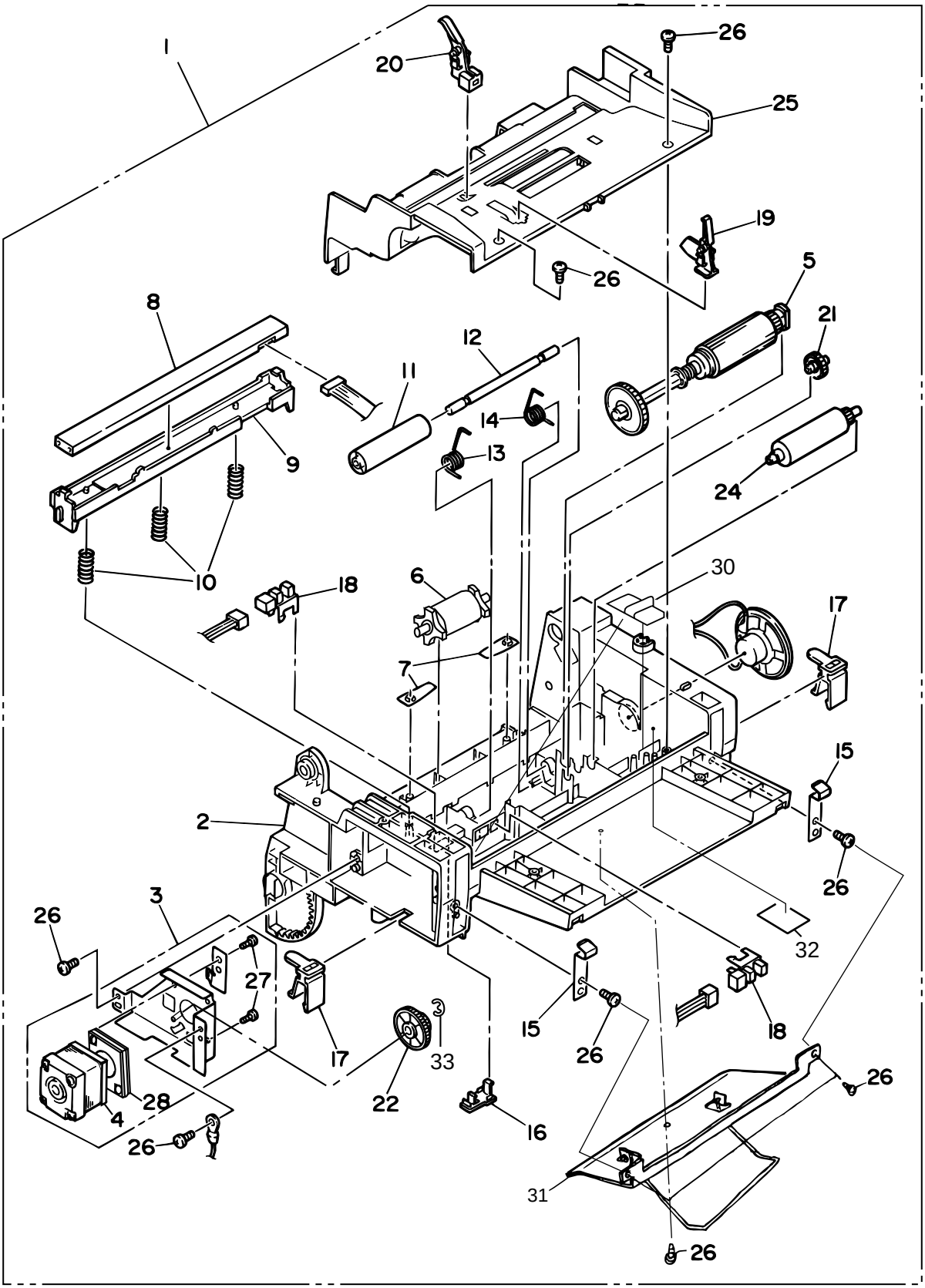
Section 4 BASE ASSEMBLY



Section 4 BASE ASSEMBLY

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1	40275501	Plate-Guard	1	
	2	41348401	Motor-Fan_DC	1	
	3a	40628501	FX-176 120V Power Supply	1	120V, ODA
	3b	40628601	FX-176 230V Power Supply	1	230V, Except ODA
	4	40660201	PWR unit-H10	1	
	5a	41873611	Board-E76-11	1	OKIFAX 5980
	5b	41873612	Board-E76-12	1	OKIFAX 5780
	6	40730201	Plate-Shield (MCNT)	1	
	7	3PA4083-6090G001	CONTACT ASSEMBLY	1	
	8	40763001	Sheet-Insulation	1	
	9	40729901	Guide-Cassette (R)	1	OKI
	10	4PP4083-7662P001	FG PLATE C	1	
	11	4PP4083-7658G001	SHEET LINK R ASSEMBLY	1	
	12	4PP4083-7666P001	SHEET SPRING	2	
	13	4PP4122-1170P001	LINK PULL LEVER	2	
	14	4PP4083-7655P001	CASSETTE LOCK SPRING	2	
	15	3PP4083-7653P001	CASSETTE LOCK LEVER	2	
	16	40730001	Plate-Base	1	
	17	4PP4083-7667P001	PAPER END SENSOR LEVER	1	
	18	3PP4083-6154P001	CASSETTE DETECTION LEVER	1	
	19	4YC4061-5115P001	POLYETHYLENE TAPE	2	L = 0.09m
	20	1PP4083-7651P001	CASSETTE GUIDE L	1	OKI
	21	4PP4083-7657G001	SHEET LINK L ASSEMBLY	1	
	22	4PP4083-7665P001	FG PLATE D	1	
	23	3PP4083-7660P001	BEAM PLATE	2	
	24		B SCREW B		
	25		B SCREW B		
	26		TAPPING SCREW B1		
	27		Screw		
	28		Screw		
	29		S SCREW C		
	30		Washer		

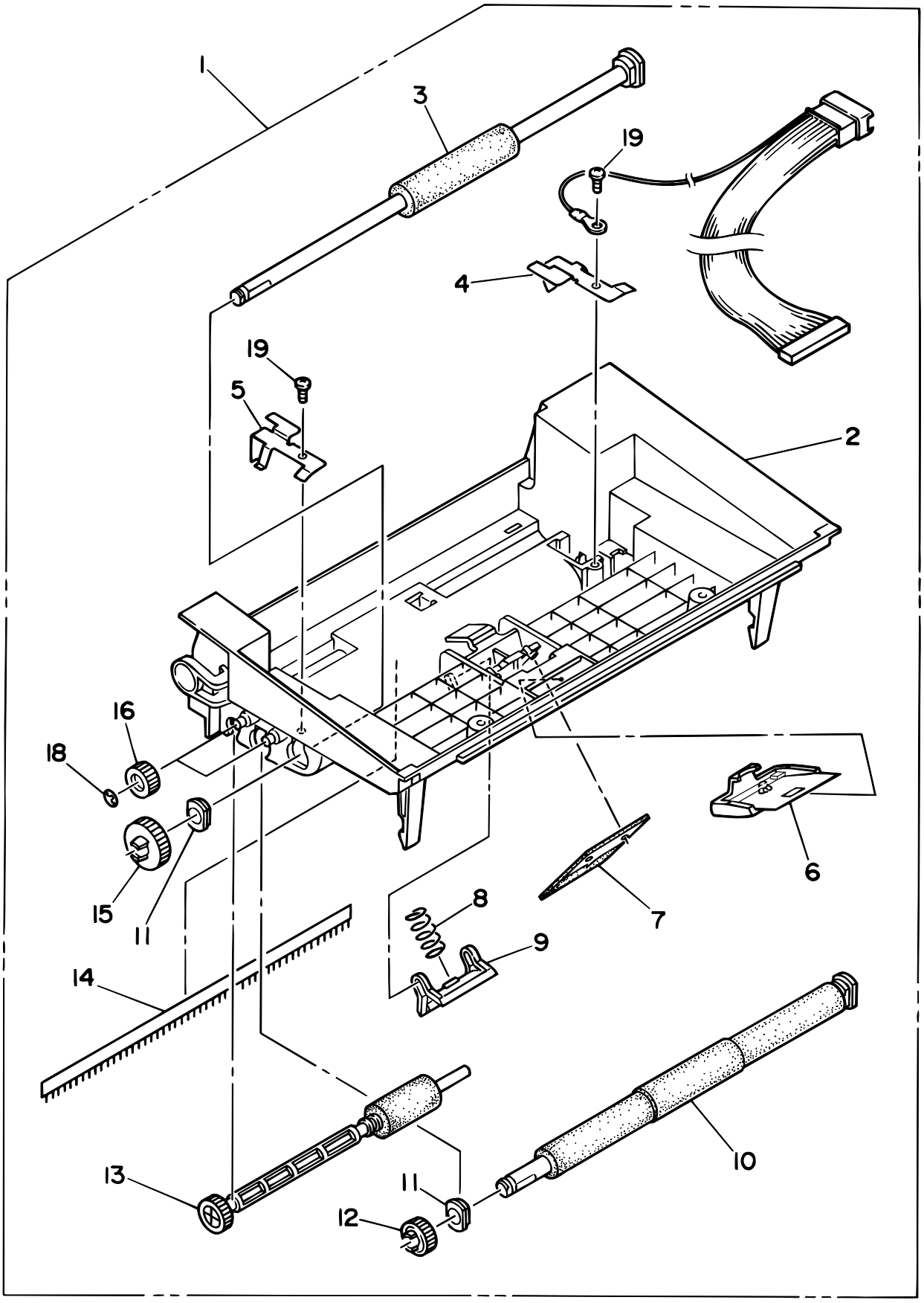
Section 5 FRAME ASSEMBLY-SCANNER (L)



Section 5 FRAME ASSEMBLY-SCANNER (L)

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1	40803505	Frame Assy.-Scanner (L)	1	
	2	40731201	Frame-Scanner (L)	1	
	3	41078003	Motor Assy.-Scanner-A	1	
	4	40803803	Motor-Pulse (S)	1	
	5	40976401	Roller Assy. -ADF	1	
	6	40983301	Roller-Exit_S	1	
	7	4PP4120-1025P001	EJECT PINCH SPRING	2	
	8	41413801	Contact Image Sensor (A4, 300DPI)	1	40809901/41181801
	9	40731501	Holder-CIS	1	
	10	40731901	Spring-CIS	3	
	11	4PP3529-5045P001	PINCH ROLLER	1	
	12	40802201	Shaft-Pinch	1	
	13	40732101	Spring-Pinch (L)	1	
	14	40732201	Spring-Pinch (R)	1	
	15	4PP4120-1032P001	LATCH SPRING	2	
	16	40915801	Cap PC2	1	
	17	40733601	Stopper-Scanner	2	
	18	40135301	Photo-Interrupter	2	
	19	3PP4120-1016P001	PC1 LEVER	1	
	20	3PP4120-1017P001	PC2 LEVER	1	
	21	4PP3529-5033P001	GEAR (Z20)	1	
	22	41244401	Gear-Idle_Z75-15	1	
	24	4PA3529-5082G001	SUB-ROLLER ASSEMBLY	1	
	25	40731301	Guide-Paper	1	
	26		B SCREW B		
	27		S SCREW B		
	28	41283901	Rubber-Damping	1	
	30	123A1120P0004	M-200 Clamp	2	
	31	41043602	Plate Assy.-Stacking	1	
	32	40947001	Tape-Insulation	1	L = 0.04m
	33	RE4-SUS	Ring	1	

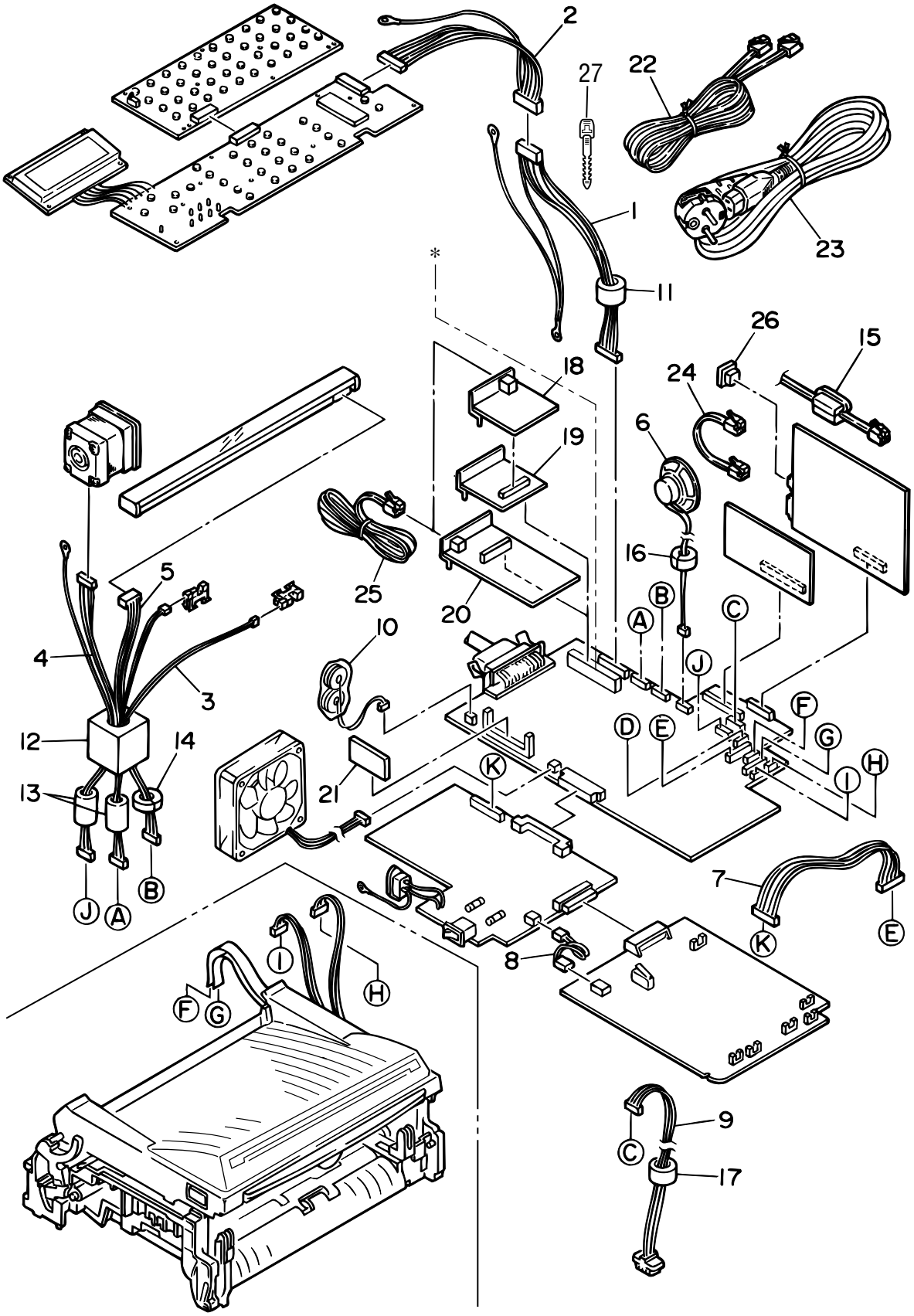
Section 6 FRAME ASSEMBLY-SCANNER (U)

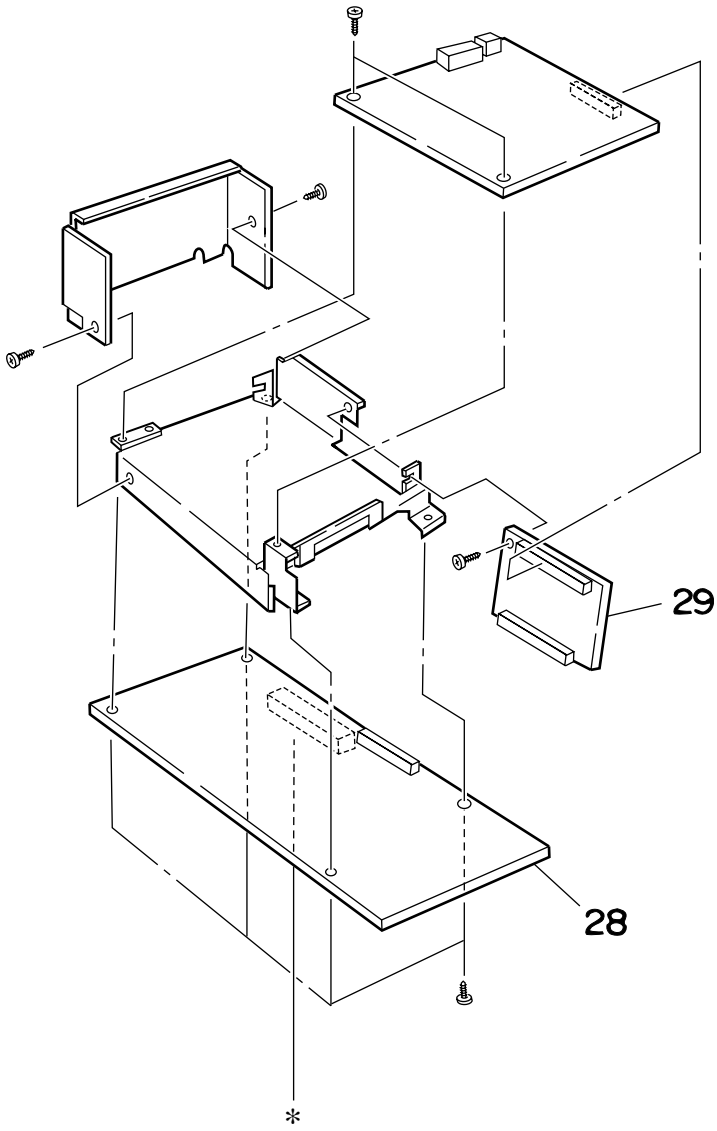


Section 6 FRAME ASSEMBLY-SCANNER (U)

Rev.	No.	Oki parts Number	Description	Q'ty	Remarks
	1	40803401	Frame Assy. -Scanner (U)	1	
	2	40731101	Frame-Scanner (U)	1	
	3	3PA4120-1045G001	FEED ROLLER (1) ASSEMBLY	1	
	4	4PP4120-1226P001	Earth-Plate (SR)	1	
	5	4PP4120-1227P001	Earth-Plate (SL)	1	
	6	40803602	Plate Assy. -Pinch	1	
	7	41276701	Rubber-Separation	1	
	8	40732001	Spring-ADF	1	
	9	4PP3527-5153P001	BACK-UP PLATE	1	
	10	40935801	Roller Assy. -Sensor	1	
	11	4PP3522-3568P001	BEARING ADF	2	
	12	4PP3529-5034P001	GEAR (Z22)	1	
	13	3PA4120-1052G001	EXIT ROLLER ASSEMBLY	1	
	14	40983001	Bar-Discharge	1	
	15	4PP3529-5035P001	GEAR (Z28)	1	
	16	4PP3527-5034P001	GEAR (Z16)	2	
	18	4PB4013-3501P003	CS-RING (CS4-SUS)	2	
	19		B SCREW B	2	

Section 7 CABLES, OPTION BOARDS




29
28
*

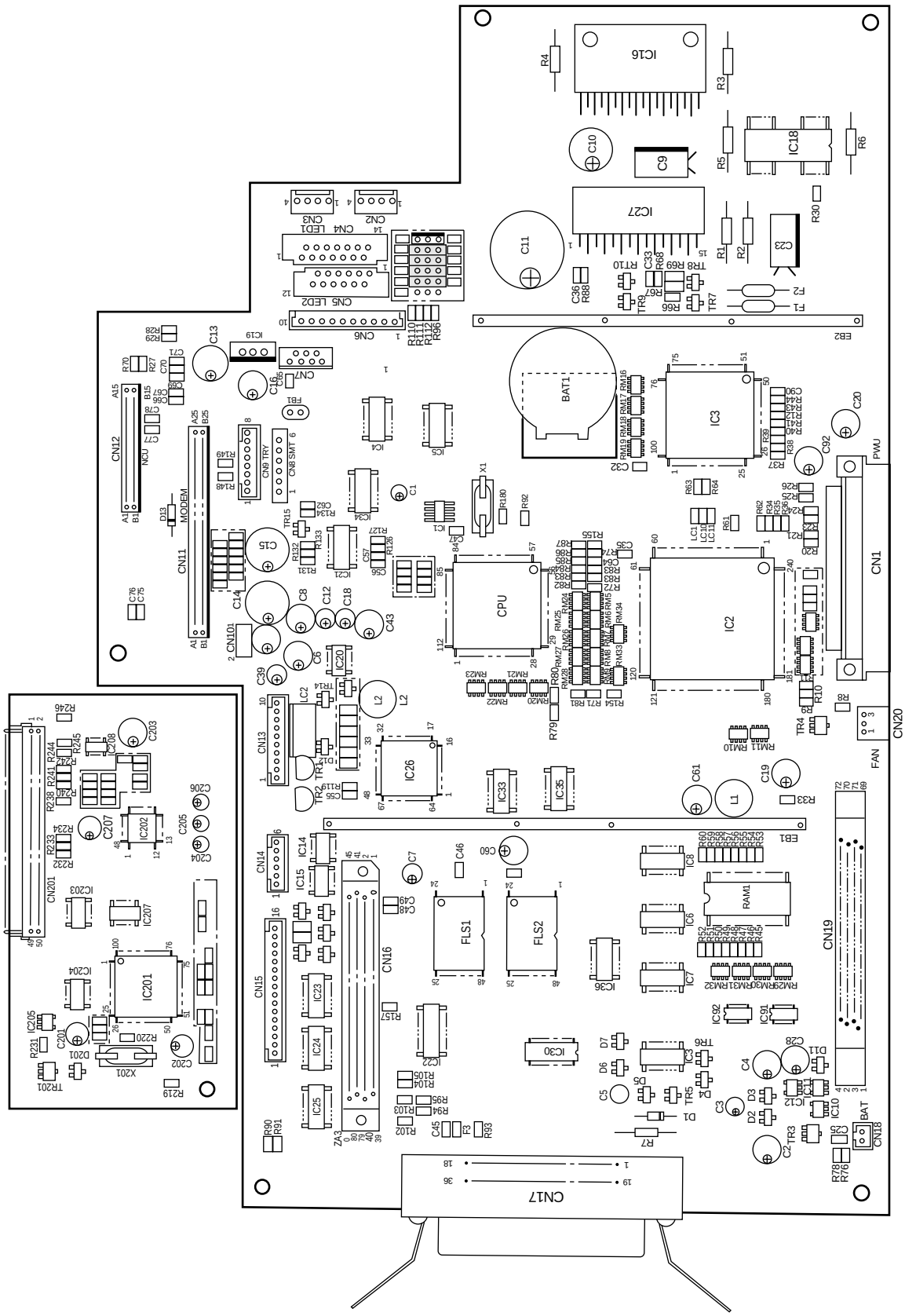
Section 7 CABLES, OPTION BOARDS

Rev.	No.	Oki parts Number	Description	Q ty	Remarks
	1	40807901	CONN Cord-OPE2	1	
	2	40807801	CONN Cord-OPE1	1	
	3	40807601	CONN Cord-PC1/PC2	1	
	4	40790701	CONN Cord-Wire Motor	1	
	5	40807501	CONN Cord-CIS	1	
	6	40916401	Speaker	1	
	7	40807701	CONN Cord-PSU (3.3V)	1	
	8	40808001	CONN Cord-PSU (High/Low)	1	
	9	3YS4111-3527P002	CONNECTOR CORD	1	
	10	40805101	Battery Assy. -Secondary	1	
	11	105A1070C0004	TFC-23-11-14 Core	1	
	12	105A1062C0002	0443-167251 Core	1	
	13	105A1068C1006	SFC-4 Core	2	
	14	105A1051C2001	TR-23-11-14 Core	1	
	15	105A1068C1004	SFC-8 Core	1	
	16	105A1051C1003	TR-16-8-13 Core	1	
	17	105A1051C3002	TR-28-16-20 Core	1	
	18	40924601	Board-Interface MLET B07	1	
	19	40804901	PCB Unit-DM1	1	
	20	40805001	PCB Unit-G4A	1	
	21a	40755201	Board-RA1 (2MB)	1	2MB
	21b	40755202	Board-RA1_2 (4MB)	1	4MB
	21c	40755203	Board-RA1-3	1	8MB
	22	236A3161P0002	FTC2-001-9SG	1	ODA (TEL/LINE Cable)
	23a	3YS4011-1329P002	AC CORD A	1	OKI-INT
	23b	4YS3512-1485P001	AC CORD	1	ODA, Note 1
	23c	40959001	Cord Power Supply	1	OEL (AC CORD), Note 2
	24	4YS4111-5581P001	CORD (TEL1-TEL2)	1	
	25	40962001	ISDN modular cord (4wire, 3m)	1	
	26	223A7010P0003	TM-6-DC1, Connector-Plug	1	
	27	LP-6041-B1	Tying Cord	3	
	28	41154301	Board-G3A	1	Dual Line
	29	41201201	Board-DM2	1	

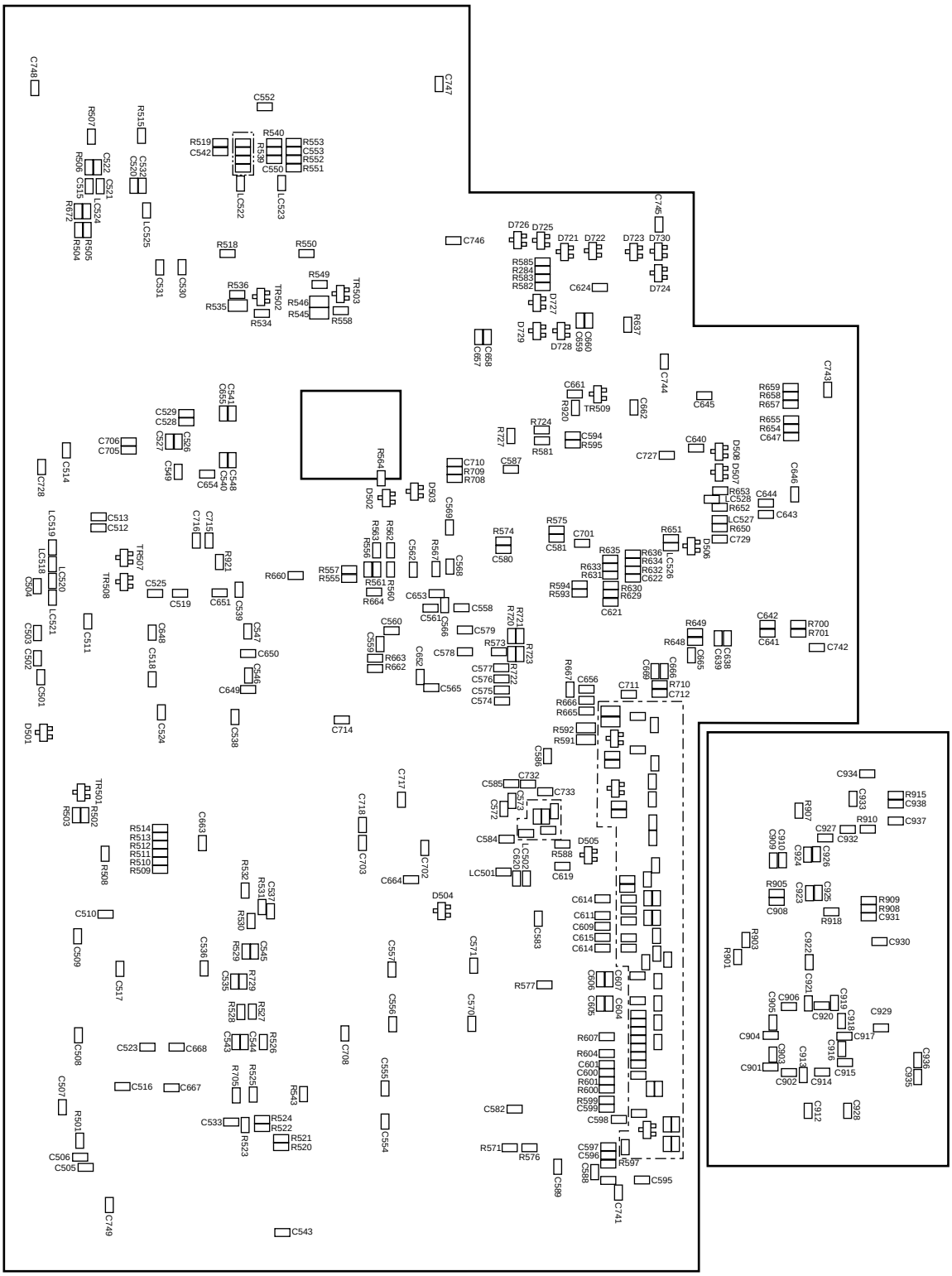
Note 1: Parts will be supplied by ODA.

Note 2: Parts will be supplied by OUK.

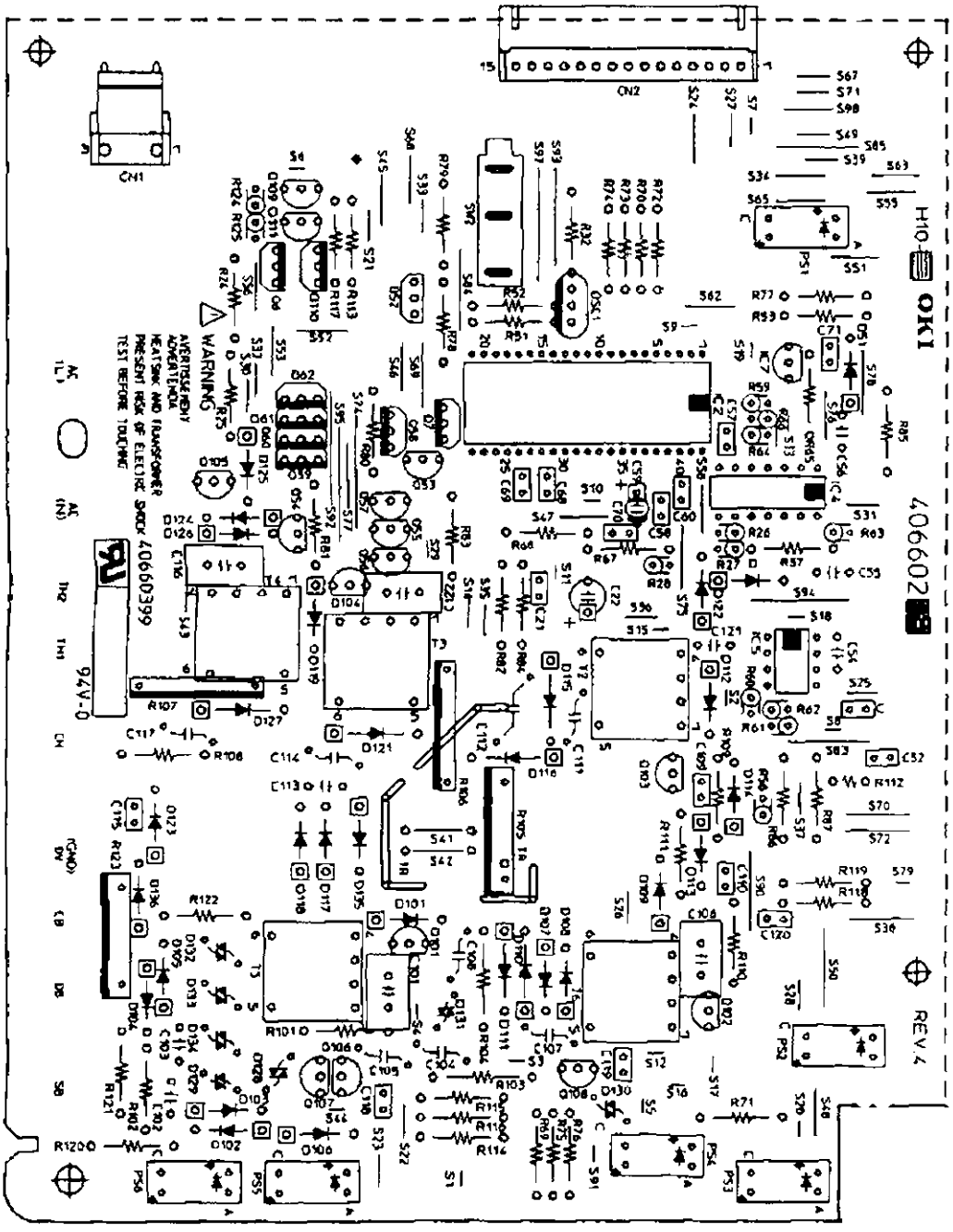
Appendix E BOARD LAYOUT FX-056VP/176VP



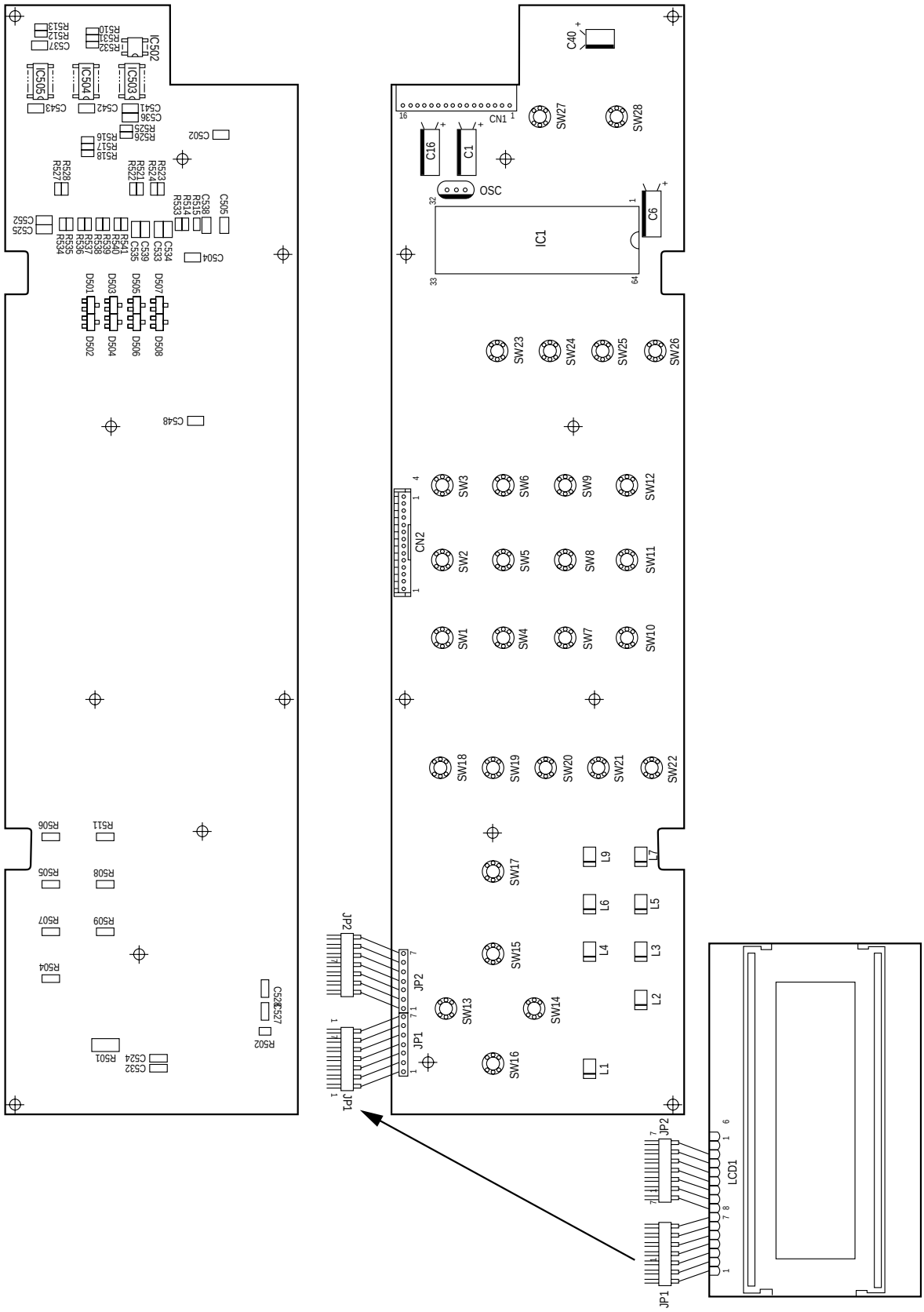
E76 PCB LAYOUT (1/2)



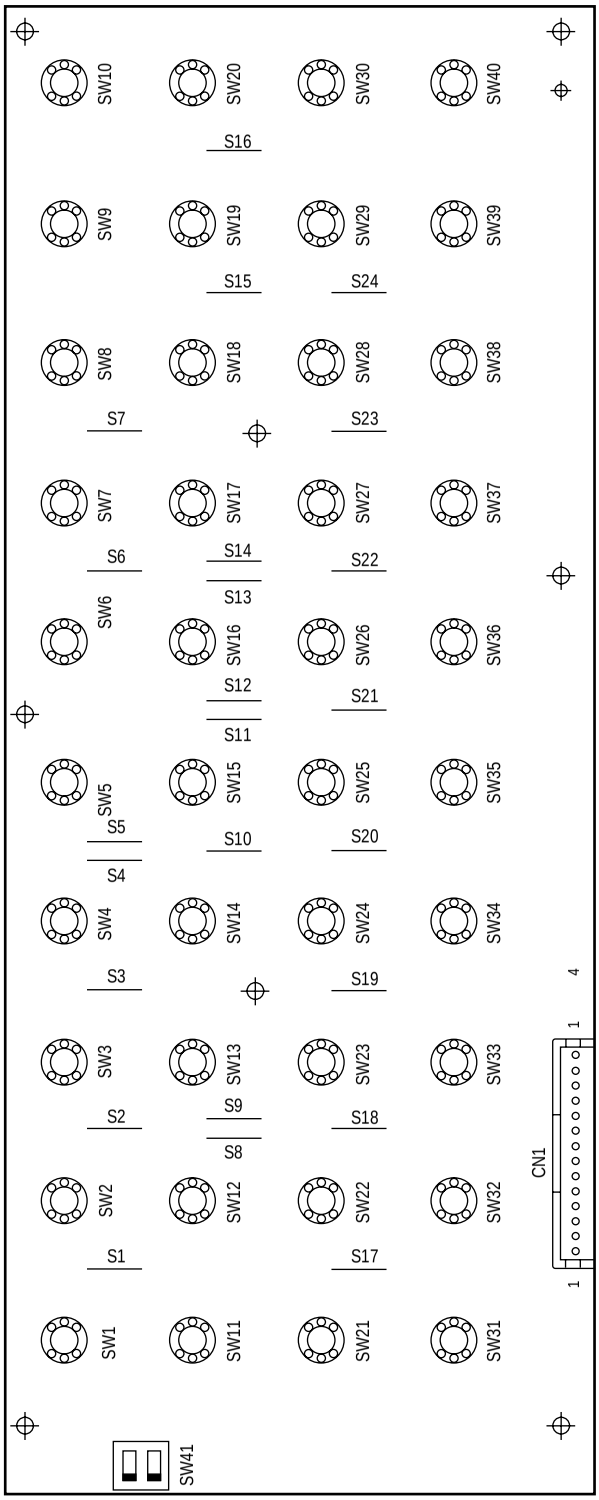
E76 PCB LAYOUT (2/2)



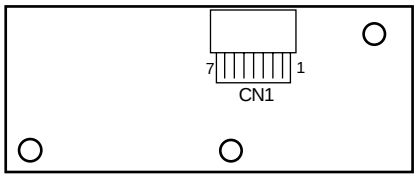
H10 PCB LAYOUT (1/1)

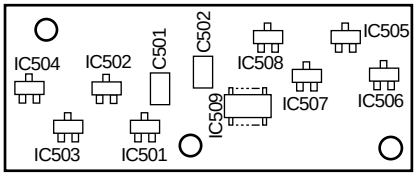


P76 PCB LAYOUT (1/1)

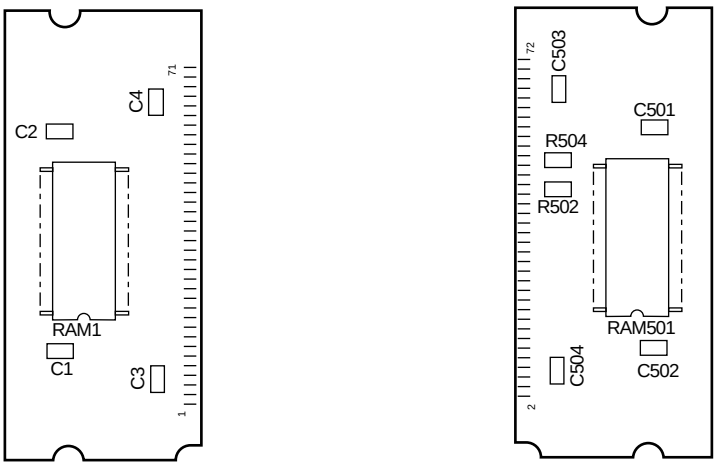


P77 PCB LAYOUT (1/1)

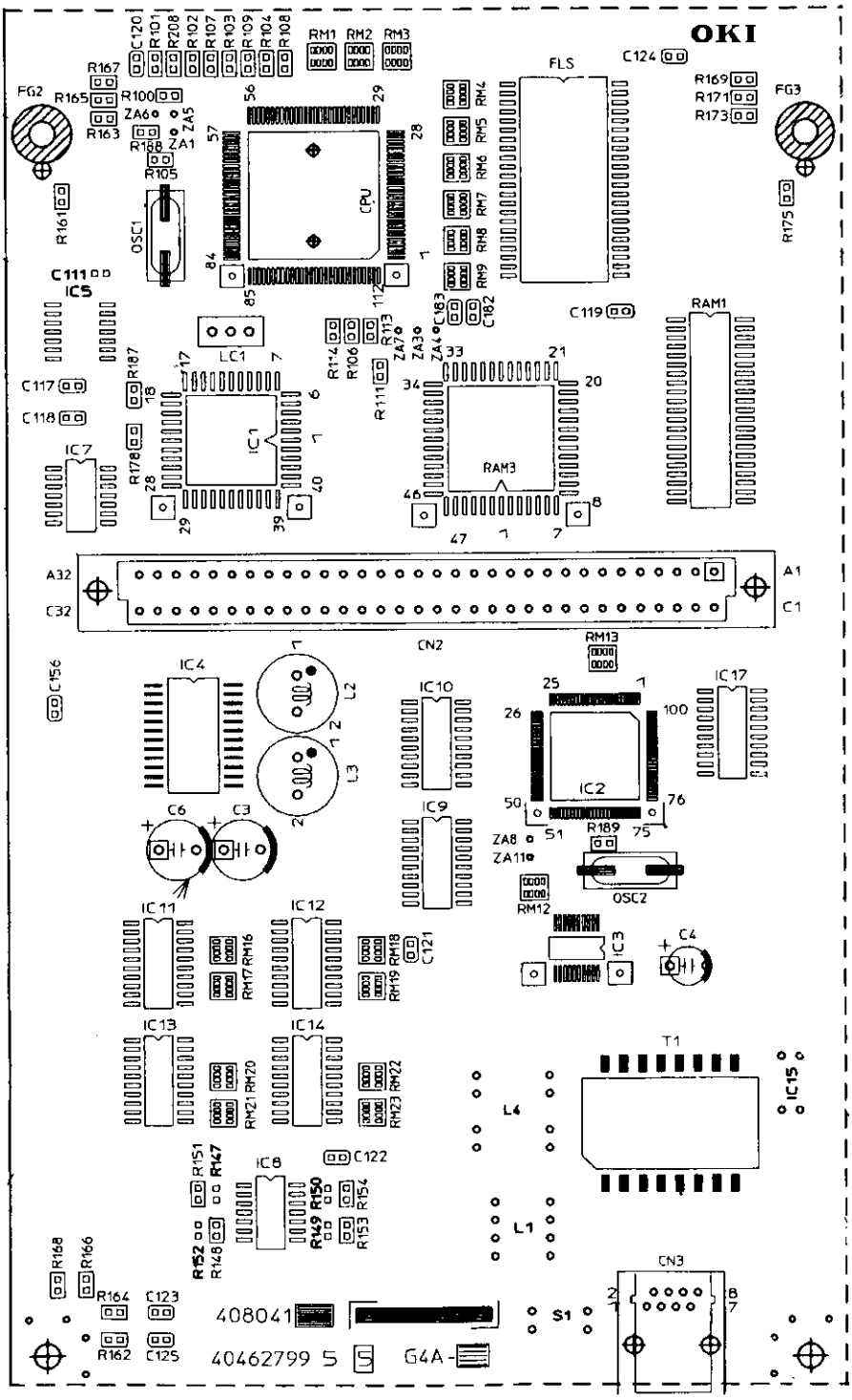




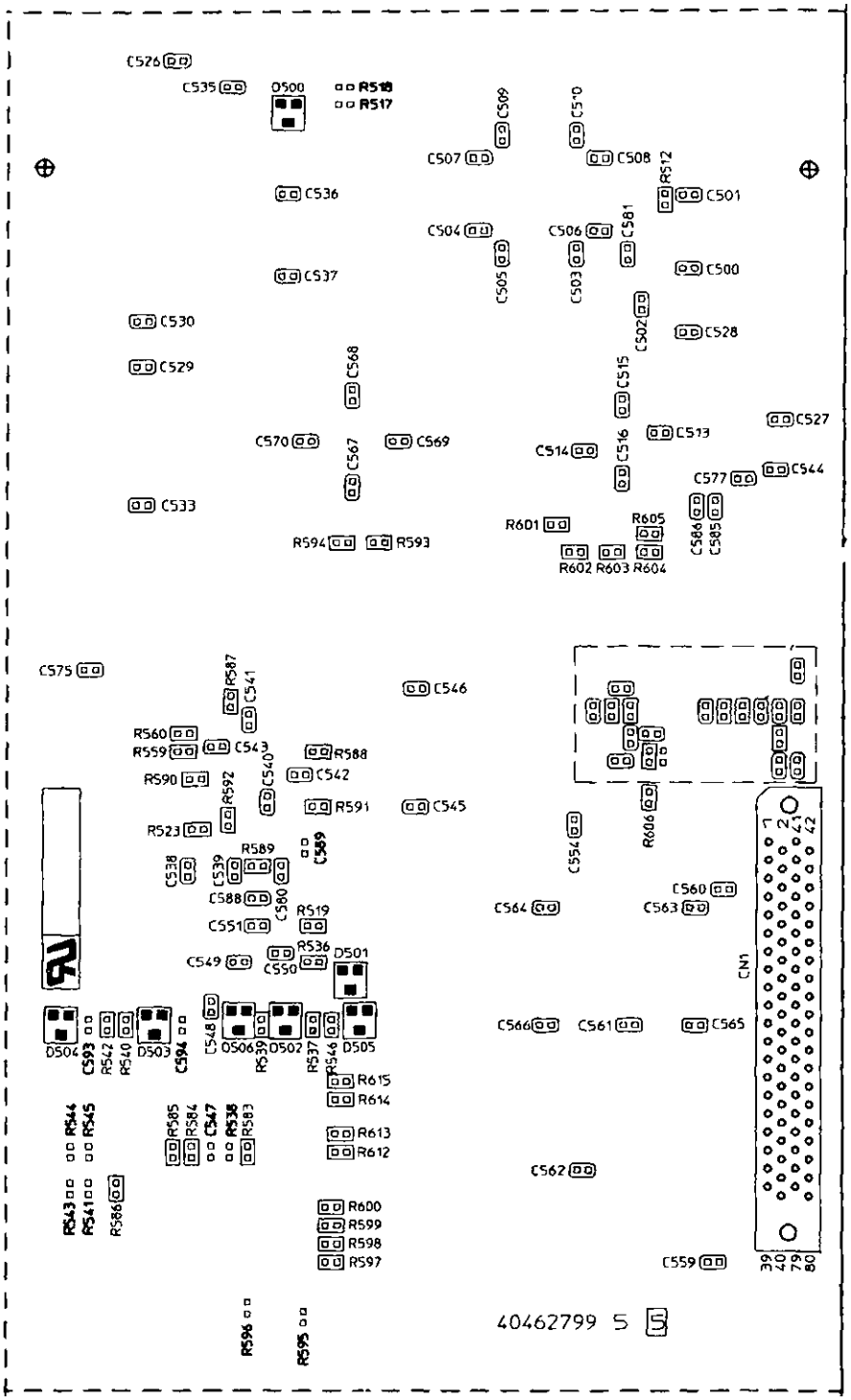
DLK PCB LAYOUT (1/1)



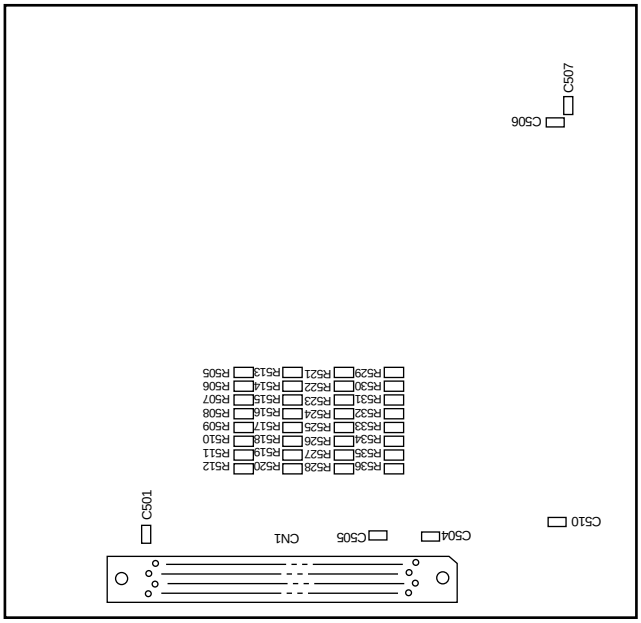
RA1 PCB LAYOUT (1/1)

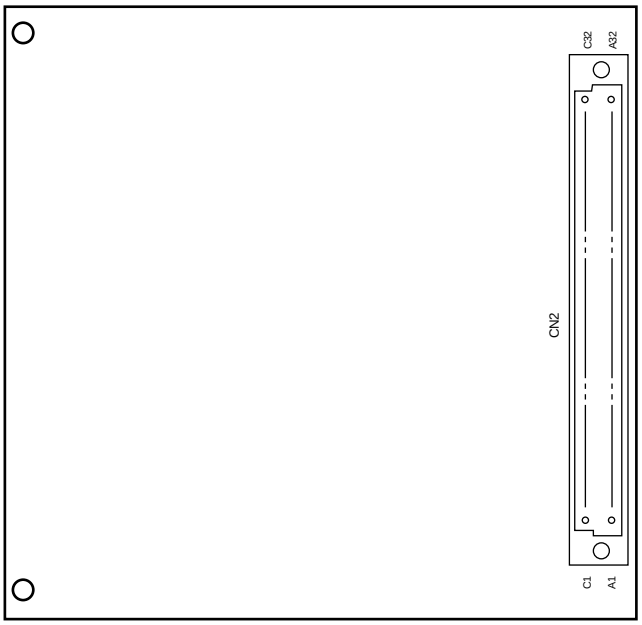


G4A PCB LAYOUT (1/2)

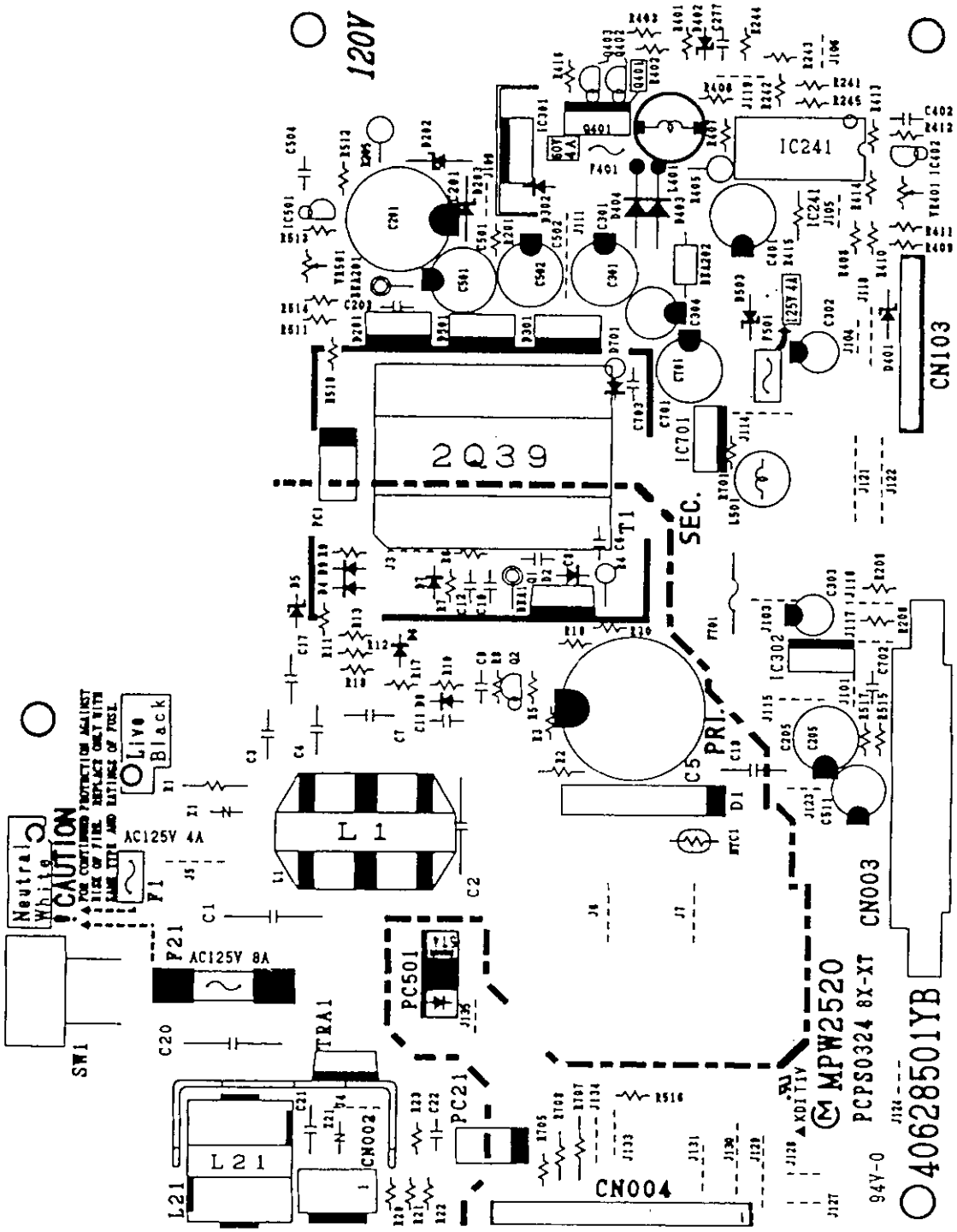


G4A PCB LAYOUT (2/2)

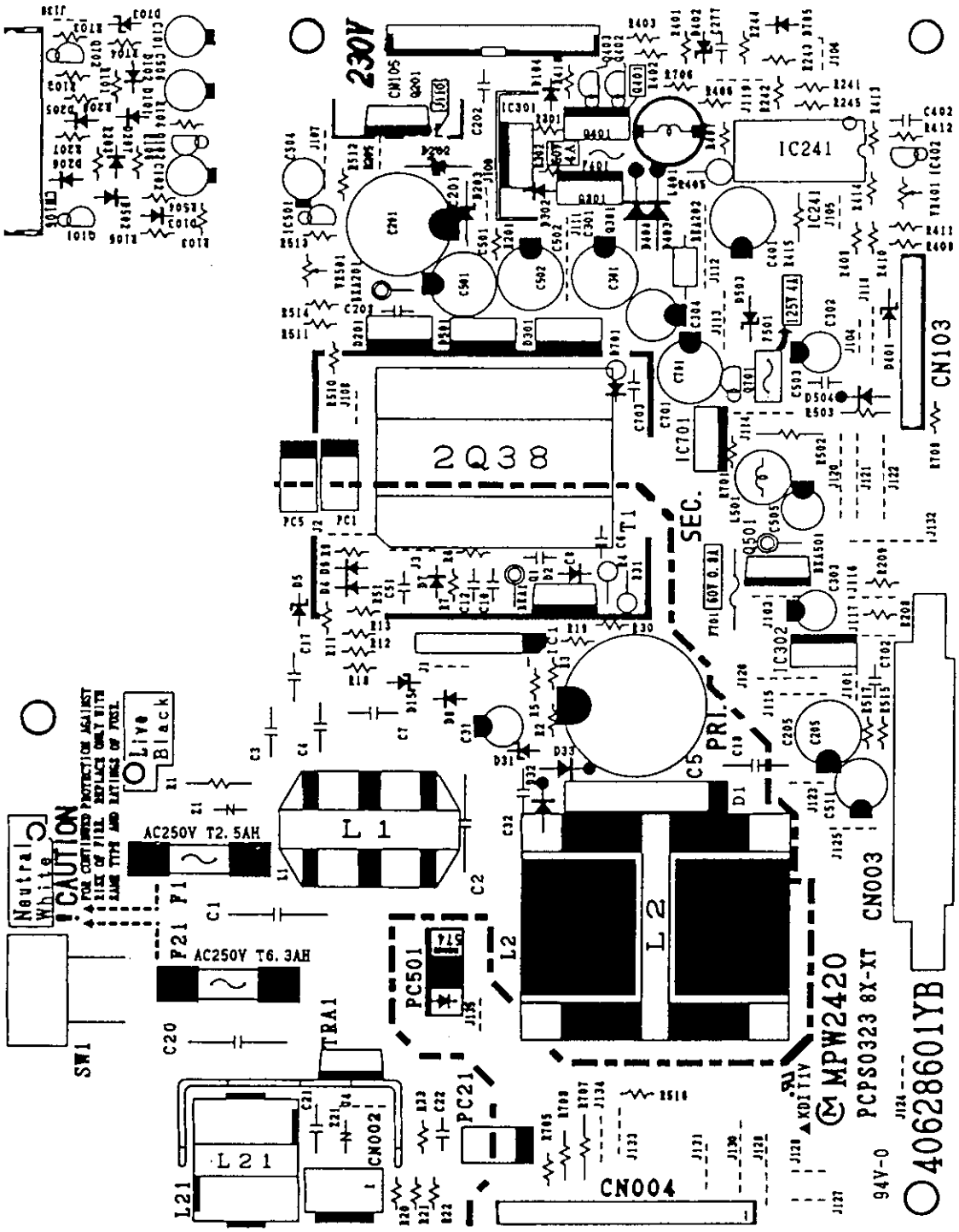




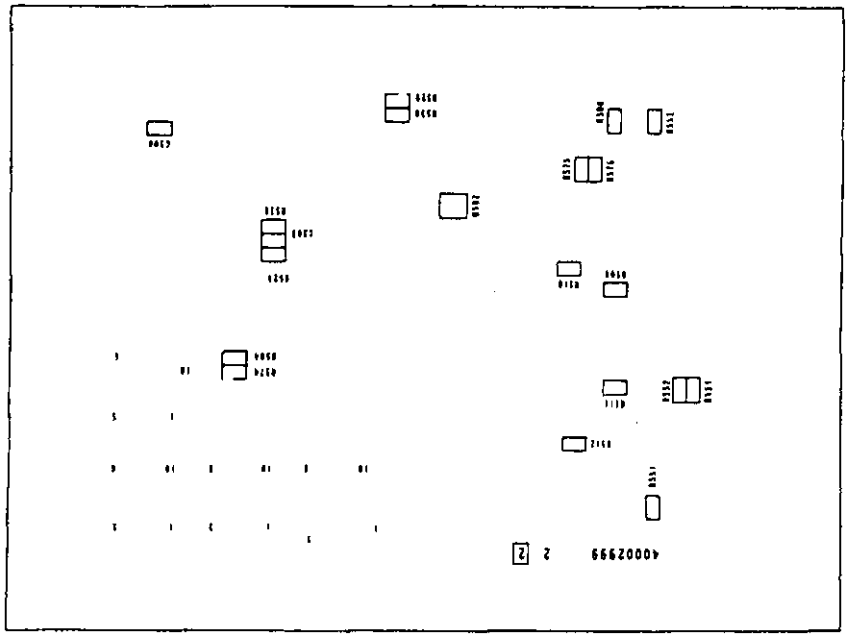
DM1 PCB LAYOUT (1/1)



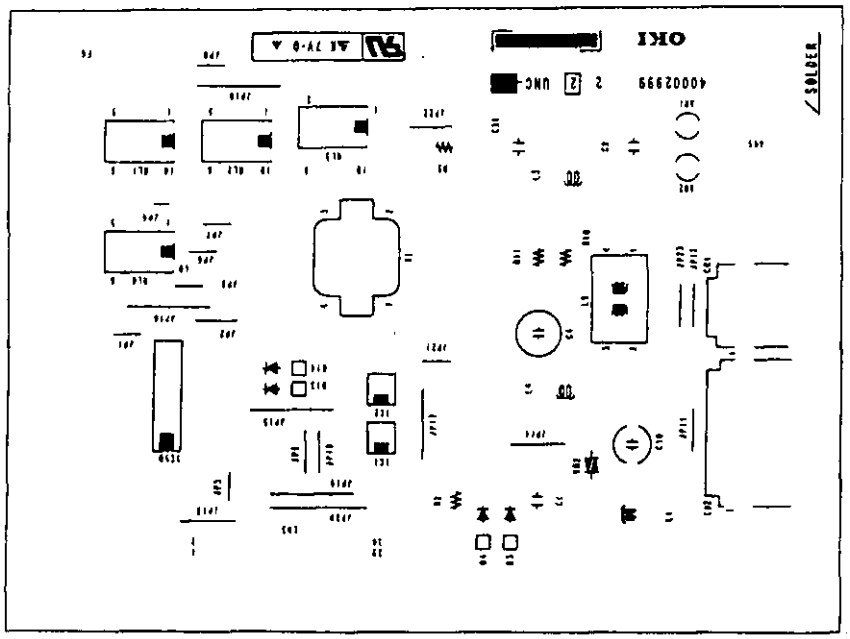
MPW2520 PCB LAYOUT (1/1)



MPW2420 PCB LAYOUT (1/1)

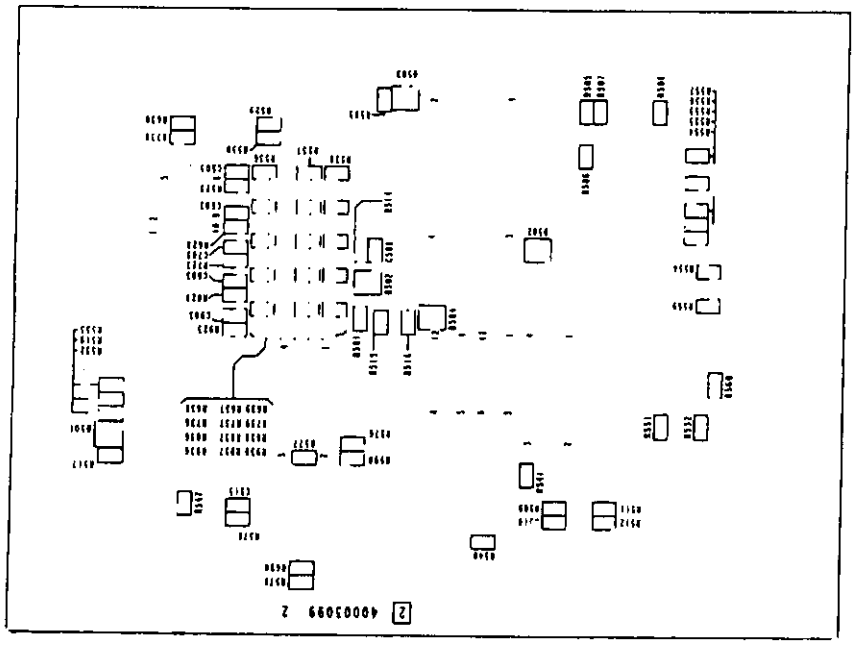


LAYER 2 SILK SCREEN

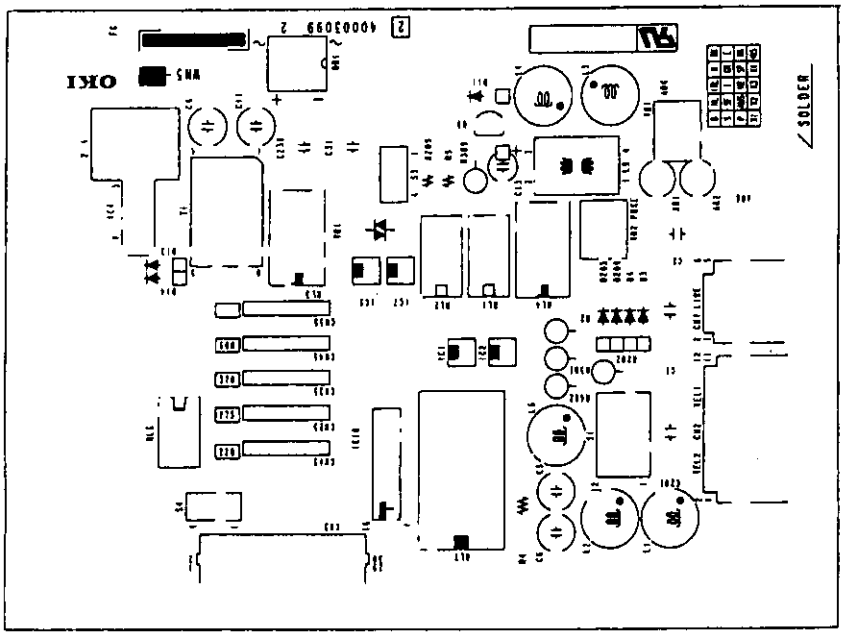


LAYER 1 SILK SCREEN

UNC PCB LAYOUT (1/1)

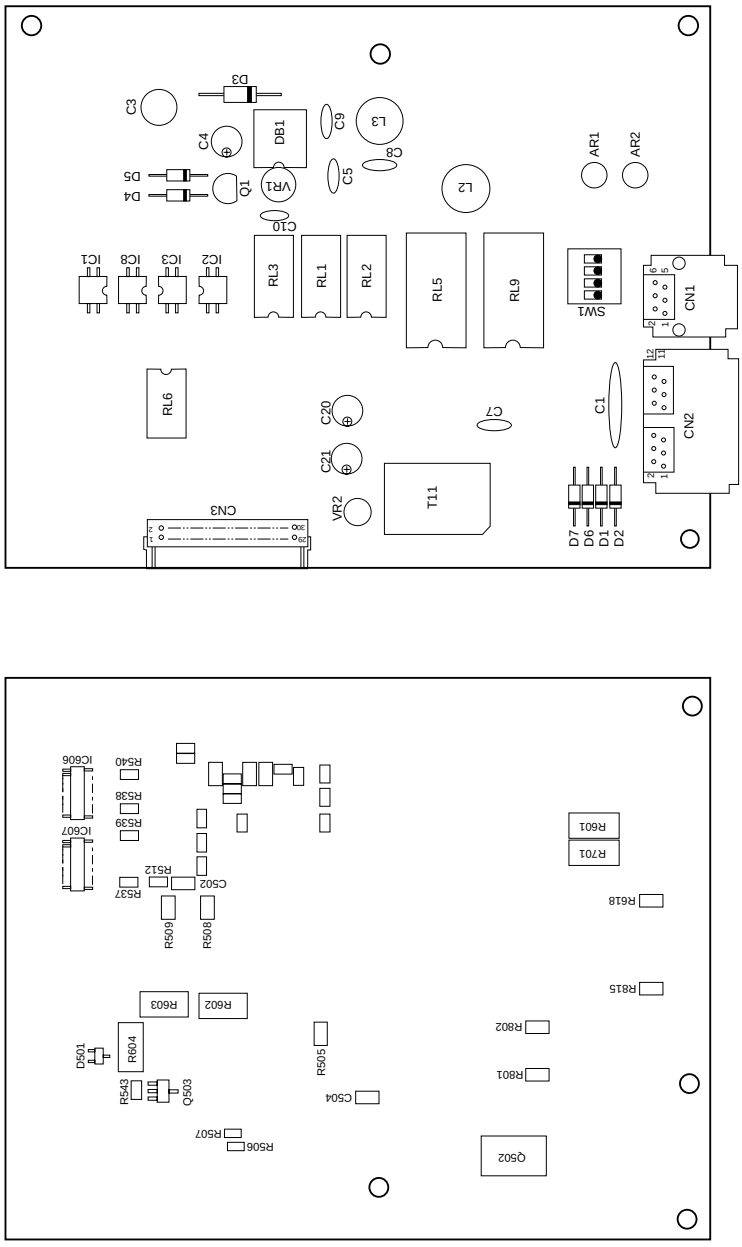


LAYER 2 SILK SCREEN

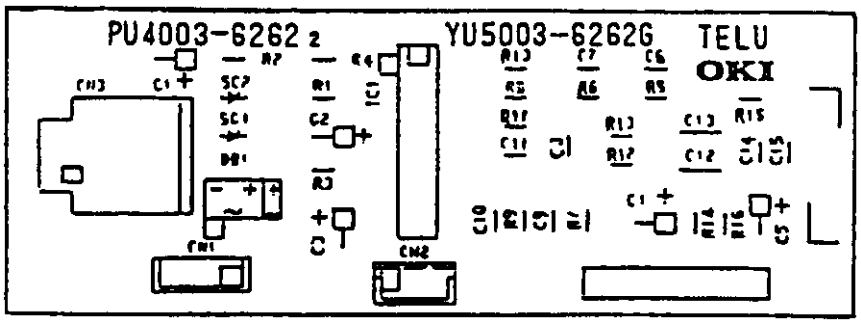


LAYER 1 SILK SCREEN

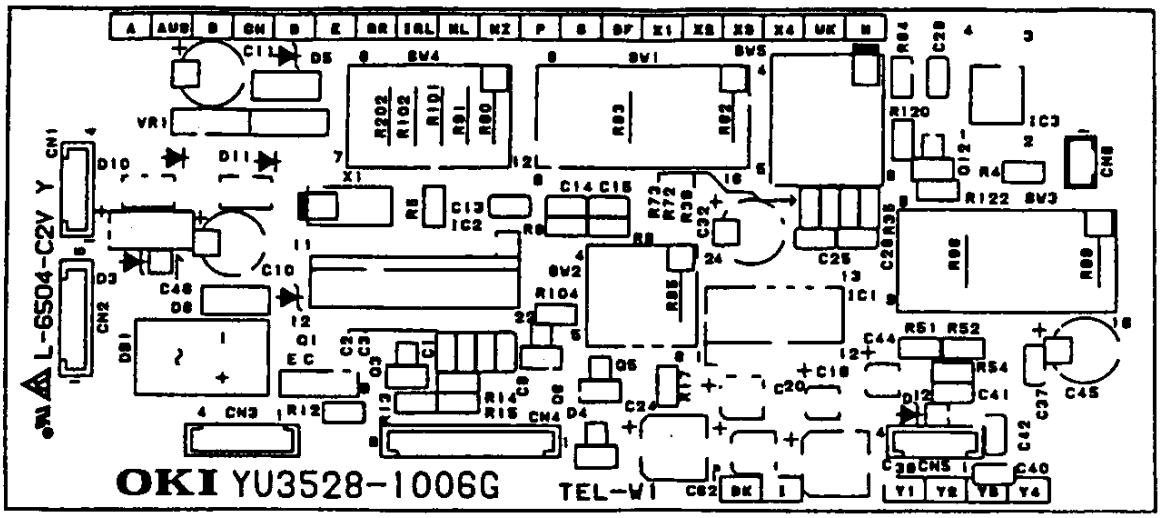
WN5 PCB LAYOUT (1/1)

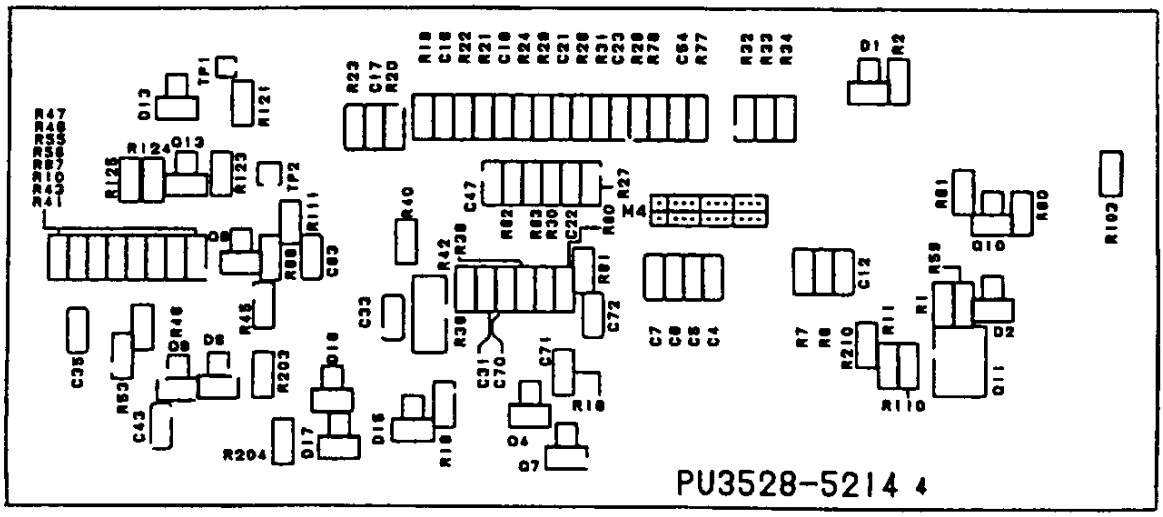


TB0 PCB LAYOUT (1/1)

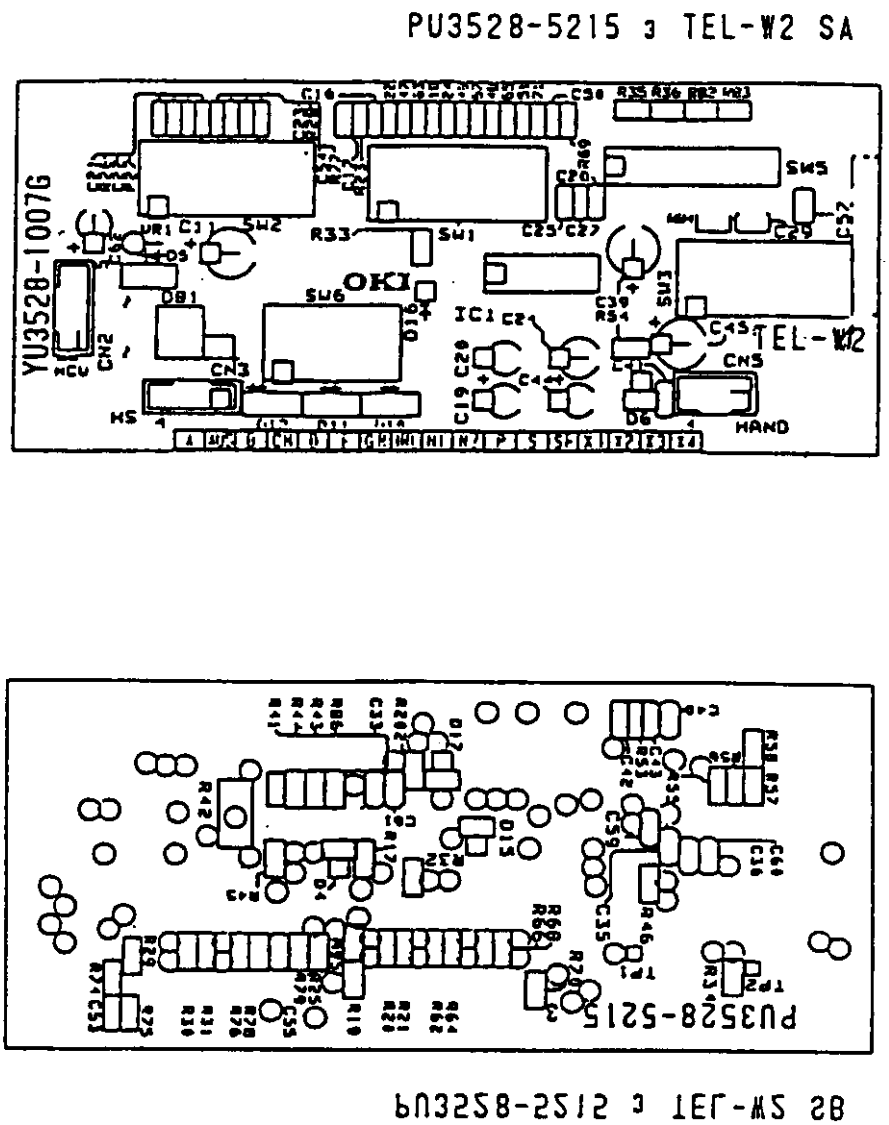


TELU PCB LAYOUT (1/1)

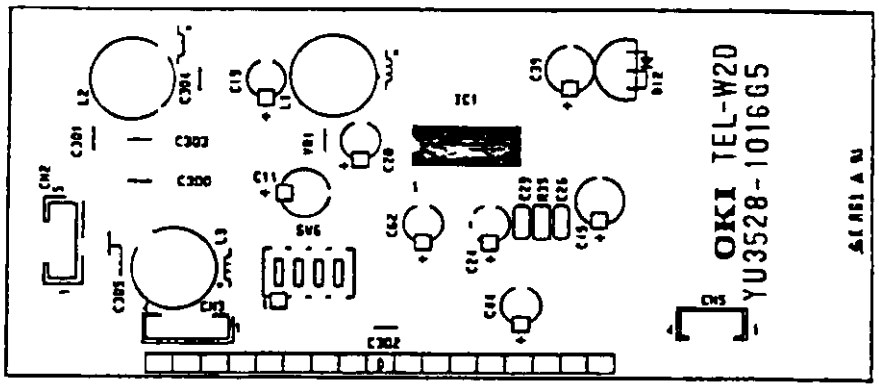


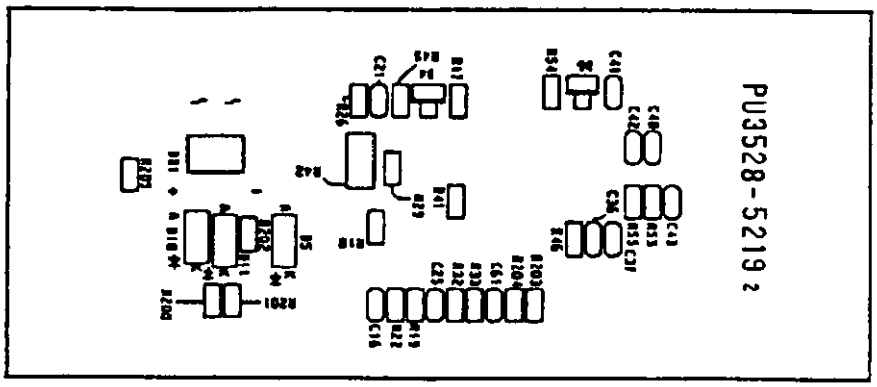


TEL-W1 PCB LAYOUT (1/1)

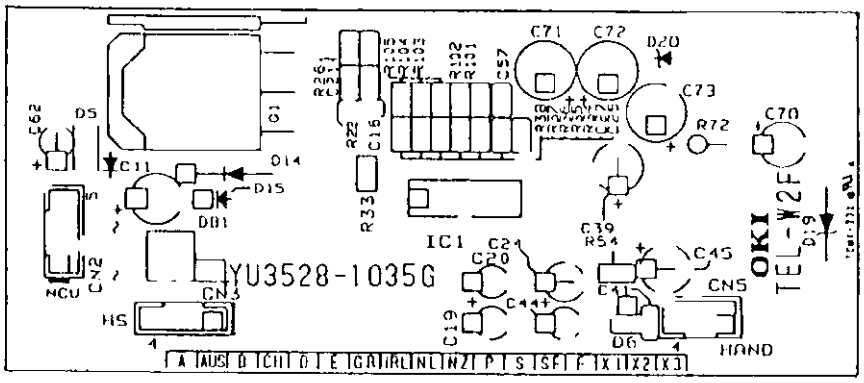


TEL-W2 PCB LAYOUT (1/1)

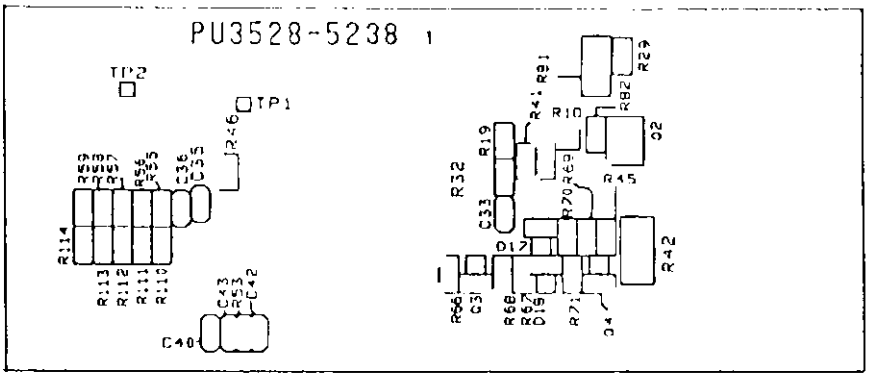




TEL-W2D PCB LAYOUT (1/1)

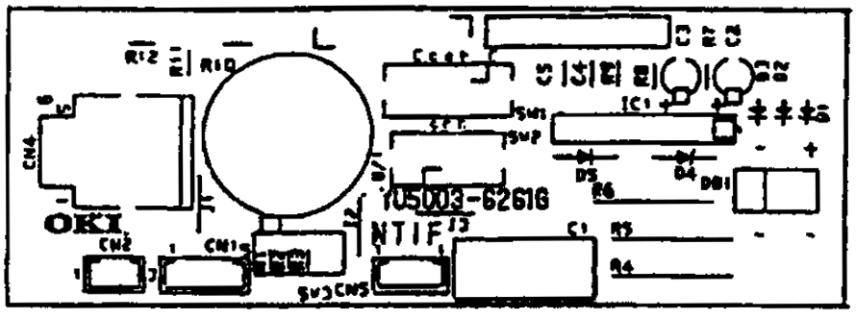


LAYER1 SILK SCREEN

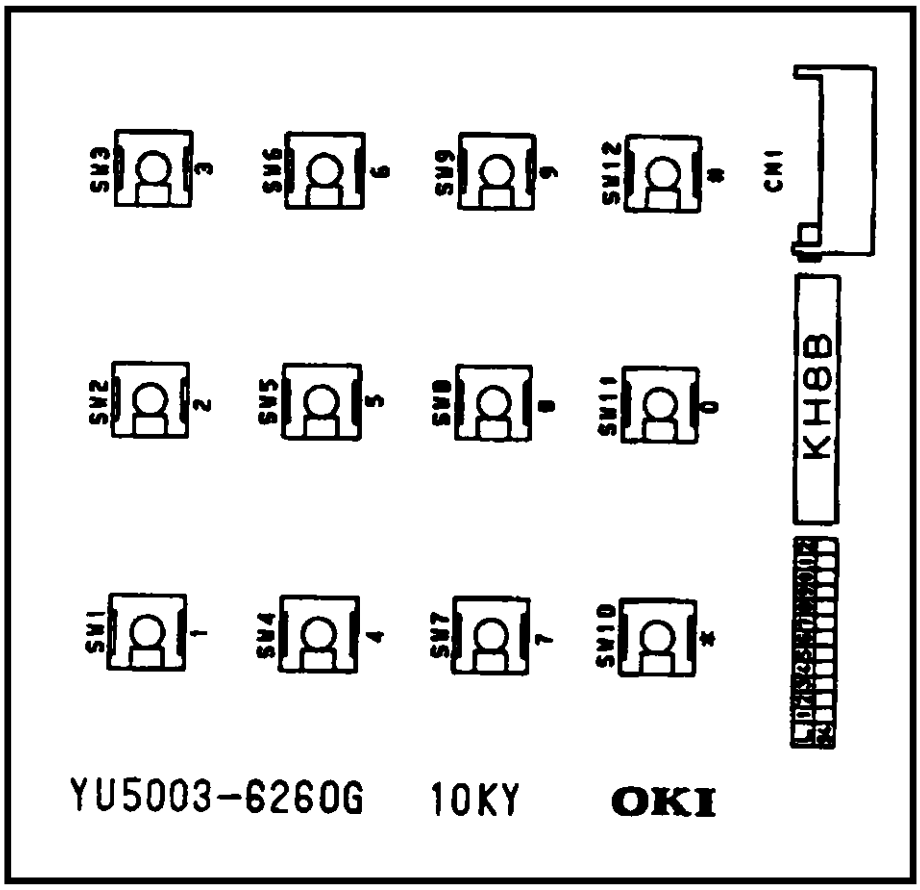


LAYER2 SILK SCREEN

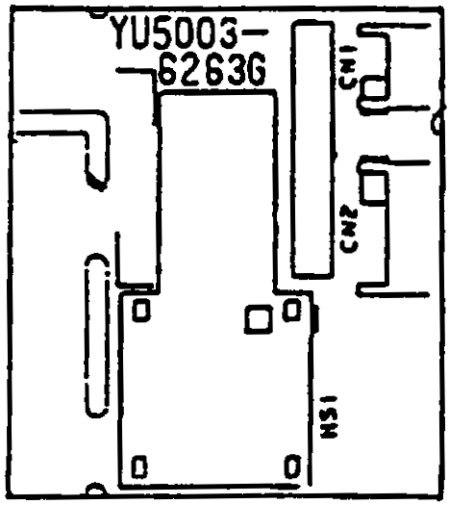
TEL-W2F PCB LAYOUT (1/1)



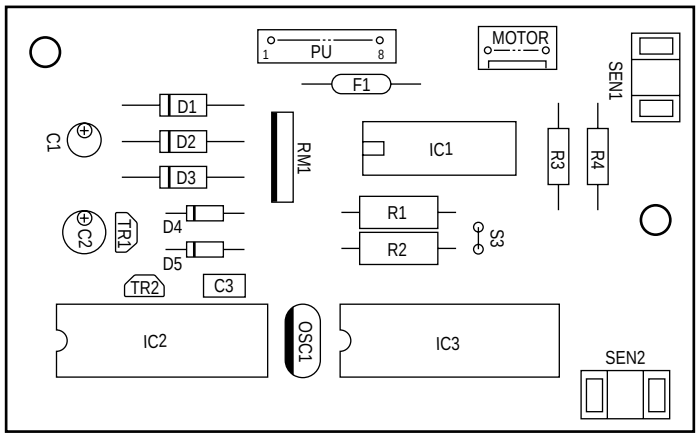
NTIF PCB LAYOUT (1/1)

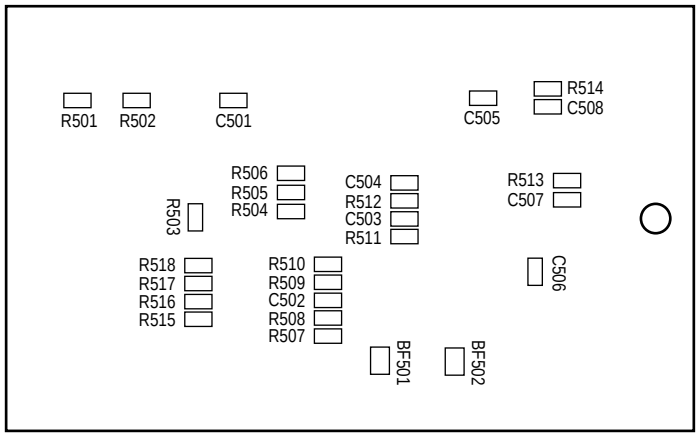


10KY PCB LAYOUT (1/1)

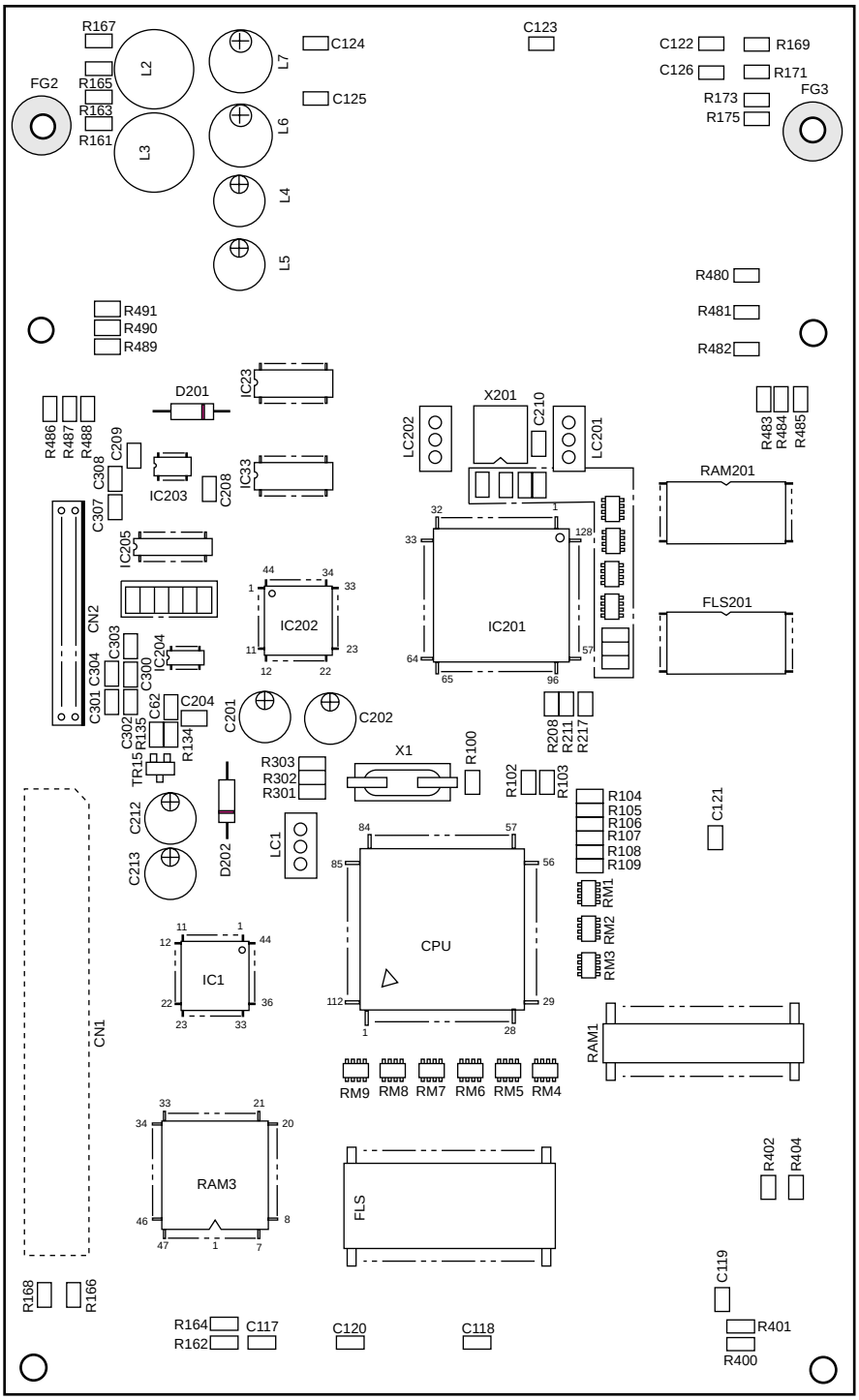


HOOK PCB LAYOUT (1/1)

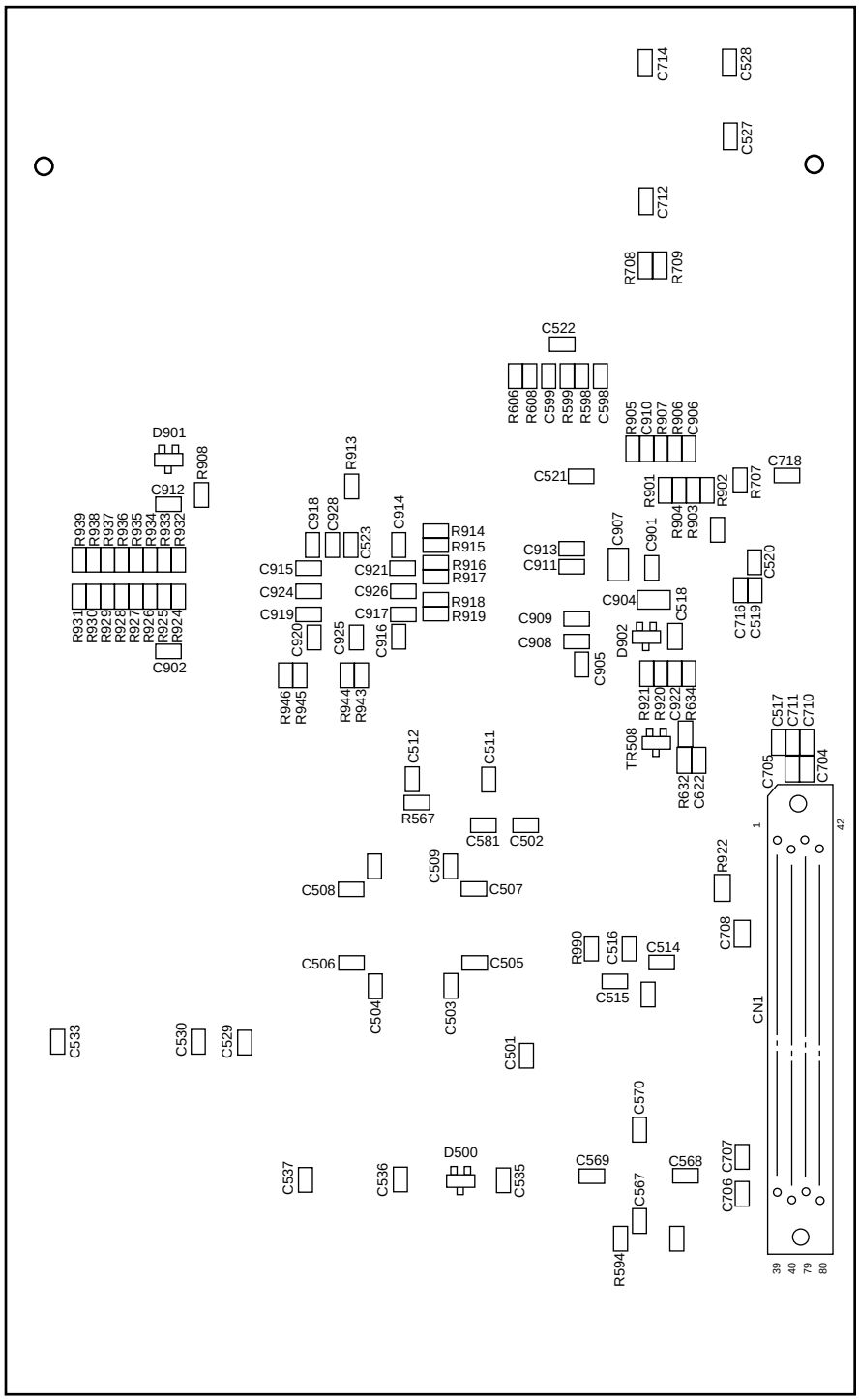




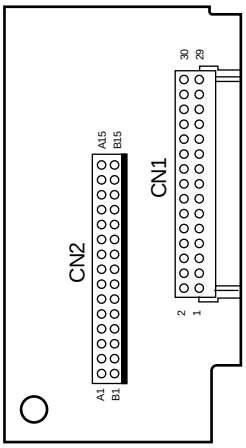
TQSB PCB LAYOUT (2nd Tray) (1/1)



G3A PCB LAYOUT (1/2)



G3A PCB LAYOUT (2/2)



DM2 PCB LAYOUT (1/1)

Appendix F SECOND PAPER FEEDER MAINTENANCE MANUAL

PREFACE

This Maintenance Manual is intended for the maintenance personnel and describes the field maintenance methods for Second Paper Feeder option of FX-056VP/176VP Series Facsimile Transceiver.

Refer to the Instruction sheet of High Capacity Second Paper Feeder option for equipment handling and operation methods.

1. OUTLINE

1.1 Functions

When the Second Paper Feeder is installed with the FX-056VP/176VP series facsimile transceiver, the Second Paper Feeder is connected to the facsimile by a connector. The Second Paper Feeder supplies paper automatically through the operation of pulse motor (hopping), which is driven by signals sent from CPU of the Second Paper Feeder under the control of the facsimile.
The main functions are the followings:

- Paper that can be used:

[Paper Type]
- Standard paper: Xerox 4200 (20-lb)
- Special paper: PPC sheets; use of envelopes or thick paper is not possible.
- Cut sheet size: A4, Letter, Legal13, Legal14
- Special size: Paper width: 210 to 216mm
  Paper length: 279.4 to 355.6mm

[Weight]
- 16-lb to 24-lb (60 to 90 g/m^2)

- Paper setting quantity: 500 sheets of paper weighing 64 g/m^2

1.2 External View and Component Names

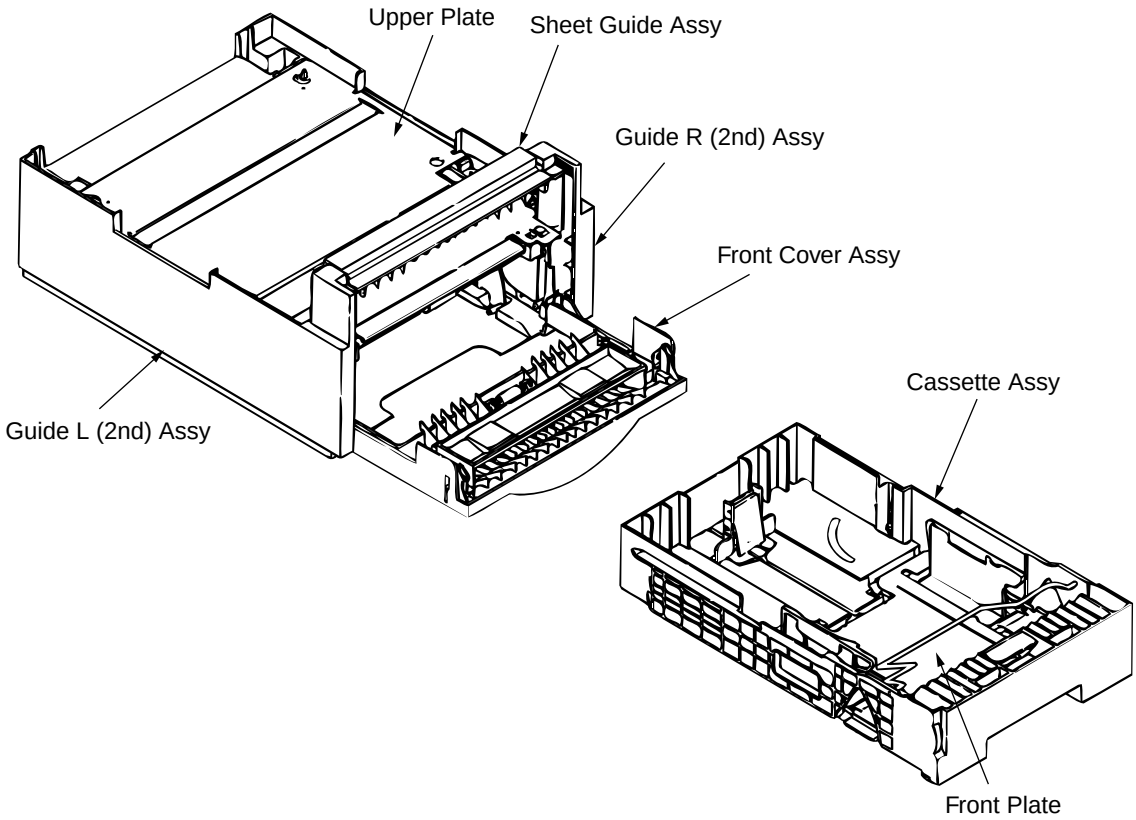


Fig. 1-1 External View and Component Names

2. MECHANISM DESCRIPTION

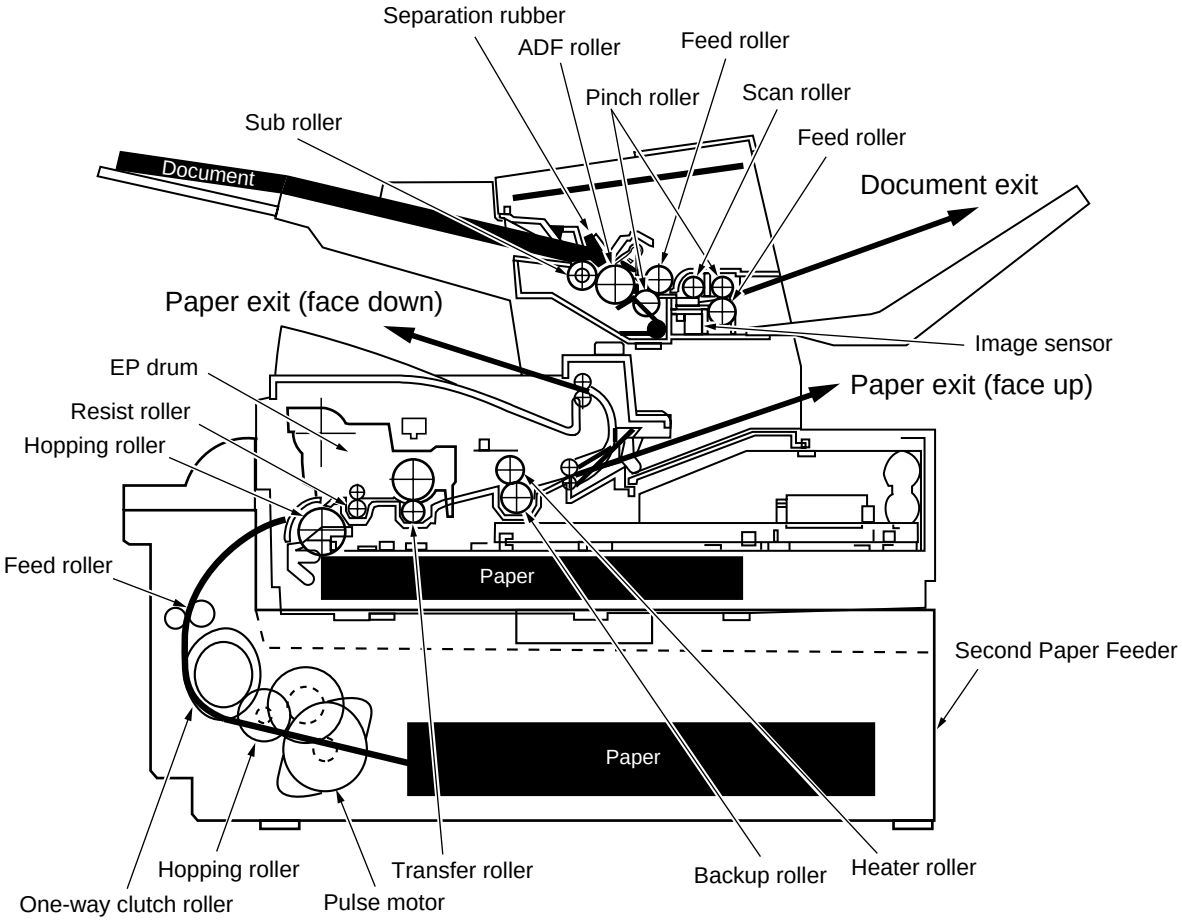
2.1 General Mechanism

The Second Paper Feeder feeds the paper into the facsimile by receiving the signal from the facsimile, which drives the pulse motor inside the Second Paper Feeder, and this motion is transmitted to rotate the one-way clutch of the hopping frame assembly. The paper is delivered from the hopper into the facsimile through the turning of the hopping roller and feed roller.

Once delivered into the facsimile, the paper is then controlled and fed through by pulse motor (registration) of the facsimile.

2.2 Hopper Mechanism

The hopper automatically feeds the facsimile with the paper being set, single sheet at a time. When the paper is loaded in the paper cassette, it is then transported by the pulse motor, carrying forward only a single sheet caught by the separation rubber at a time.



3. PARTS REPLACEMENT

This section covers the procedures for the disassembly, reassembly and installations in the field.
This section describes the disassembly procedures, and for reassembly procedures, basically proceed with the disassembly procedures in the reverse order.

3.1 Precautions Concerning Parts Replacement

(1) Parts replacements must be carried out, by first turning the facsimile power switch off “O” and removing the facsimile from the Second Paper Feeder.

(2) Do not disassemble the Second Paper Feeder if it is operating normally.

(3) Establish the extent of disassembly suitable for the purpose of the procedure, and do not disassemble any more than necessary.

(4) Only specified service tools may be used.

(5) Disassembly must be carried out according to the prescribed procedures. Parts may be damaged if such procedures are not followed.

(6) Small parts such as screws and collars can easily be lost, therefore these parts should be temporarily fixed in the original location.

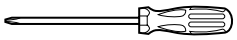
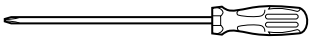
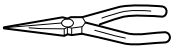
(7) When handling printed circuit boards, do not use any glove which may generate static electricity.

(8) Do not place the printed circuit boards directly on the equipment or floor.

[Service Tools]

Table 3-1 shows the tools required for the replacement of printed circuit boards, assemblies and units in the field.

Table 3-1 Service Tools

No.	Service Tools		Q'ty	Application	Remarks
1		No. 1-100 Philips screwdriver	1	2 ~ 2.5 mm screws	
2		No. 2-100 Philips screwdriver	1	3 ~ 5 mm screws	
3		No. 3-100 screwdriver	1		
4		Digital multimeter	1		
5		Pliers	1		

3.2 Parts Layout

This section describes the layout of the main components.

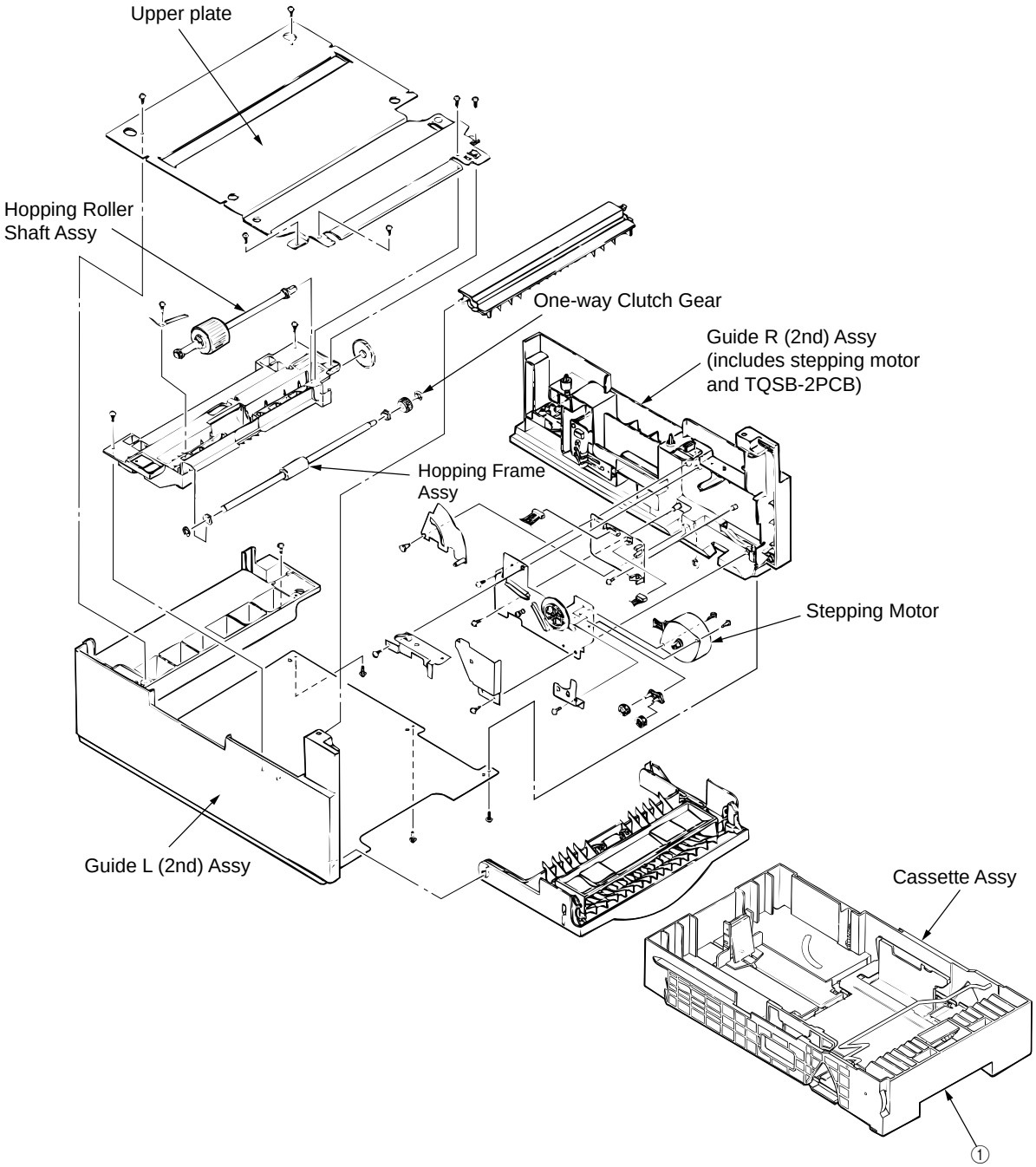
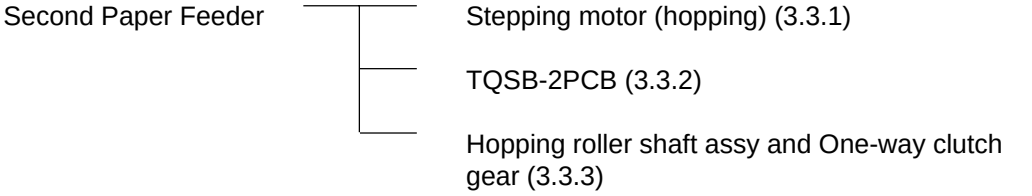


Fig. 3-1

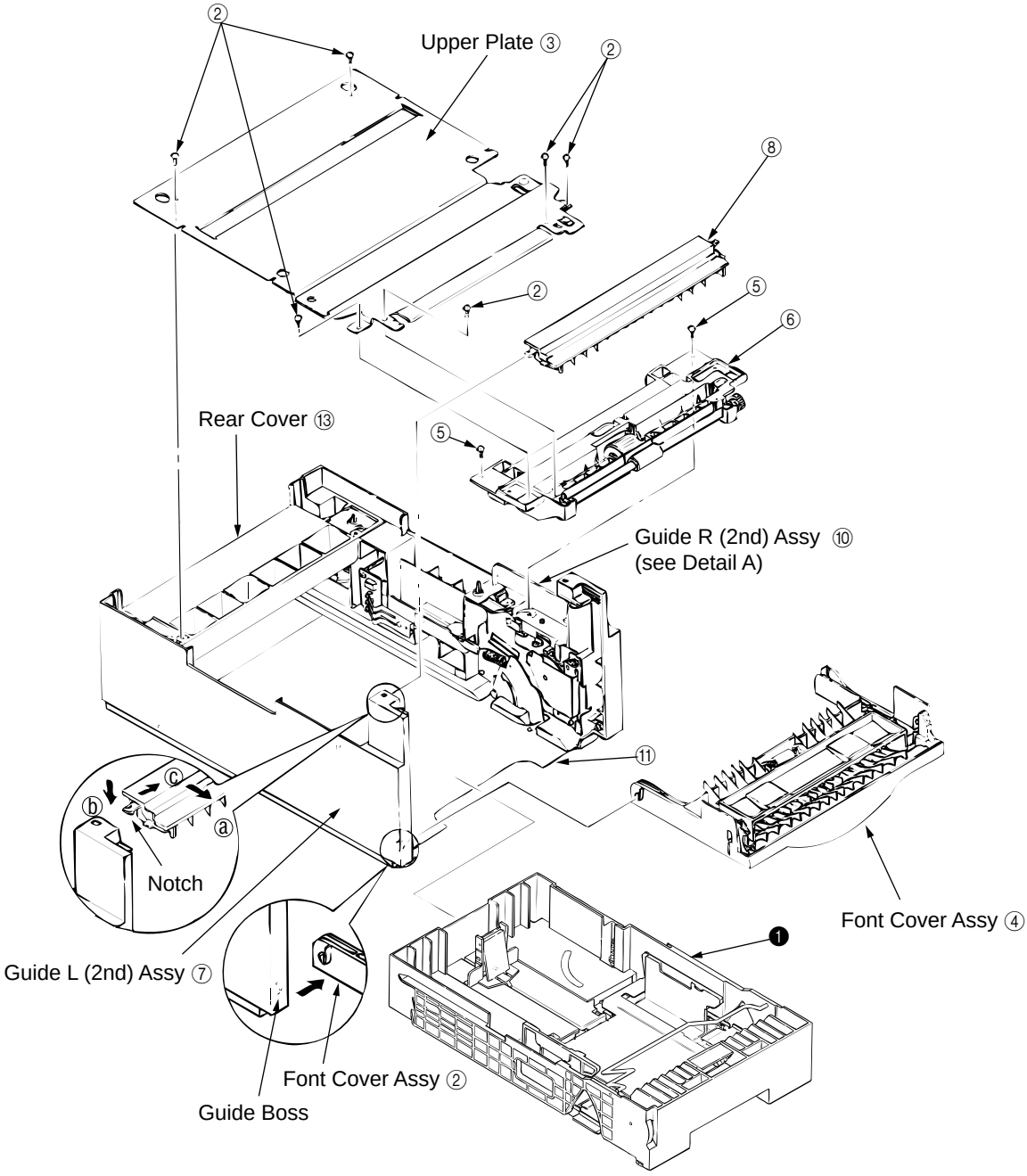
3.3 Parts Replacement Methods

This section describes the parts replacement methods for the components listed in the disassembly order diagram below.

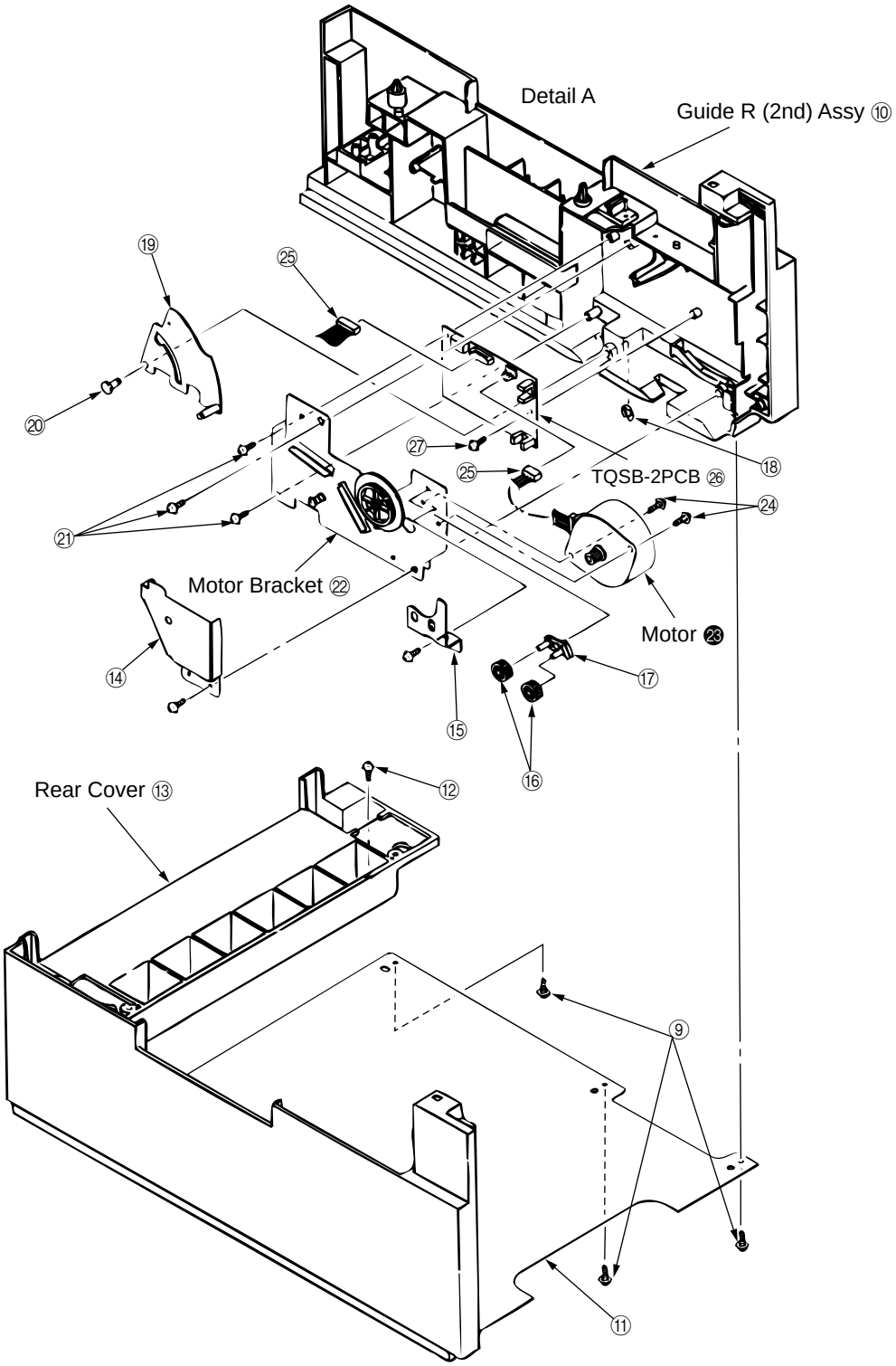


3.3.1 Stepping Motor (Hopping)

(1) Turn the facsimile power switch off, pull out the AC cord from the outlet. Remove the facsimile off Second Paper Feeder.
(2) Take the paper cassette assy ❶ out of Second Paper Feeder.
(3) Remove six screws ② and remove the upper plate ③. Remove two screws ⑤ and remove the hopping frame assy ⑥.
(4) Remove the front cover assy ④ off the guide boss on the guide L (2nd) assy ⑦ by bending the guide L (2nd) assy ⑦ in the direction of arrow shown in the magnified view below.
(5) Pull the sheet guide assy ⑧ in the direction of arrow ⓐ and also push in the direction of arrow ⓑ to unlock the notch, and bring the sheet guide assy ⑧ in the direction of arrow ⓒ to remove the sheet guide assy ⑧.



(6) Remove three screws ⑨ which are holding the guide R (2nd) assy ⑩ to the bottom plate ⑪. Remove the screw ⑫ which is keeping the rear cover ⑬ and guide R (2nd) assy ⑩. Remove the guide R (2nd) assy ⑩.
(7) Remove the protect (M) ⑭, guide bracket ⑮, planet gears ⑯ and planet gear bracket ⑰.
(8) Remove the E-ring ⑱ which is keeping the sheet link ⑲ on the guide R (2nd) assy ⑩, and pull out the hinge stand ⑳.
(9) Remove three remaining screws ㉑ which are keeping the motor on the motor bracket ㉒, and remove the connector off the Stepping Motor ㉓.
(10) Remove two screws ㉔ on the Stepping Motor ㉓.



3.3.2 TQSB2-PCB

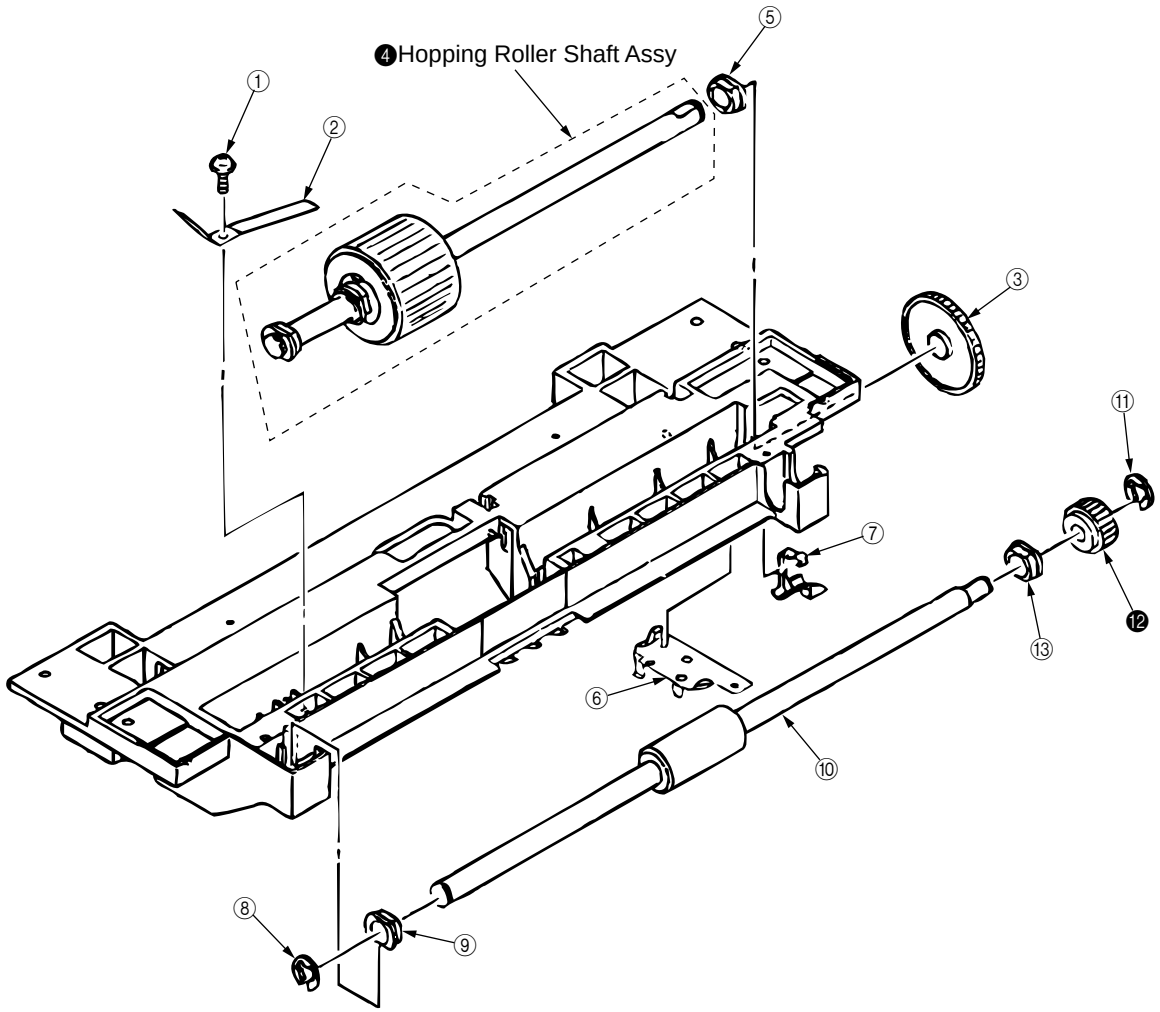
(1) Remove the pulse motor (see 3.3.1).
(2) Remove the connector ㉕ from the TQSB-2PCB ㉖.
(3) Remove the screw ㉗ and remove the TQSB-2PCB ㉖.

Note : Refer to Detall A in the previous page.

3.3.3 Hopping Roller Shaft Assy and One-way Clutch Gear

(1) Follow up to step (3) of 3.3.1 and remove the hopping frame assy.
(2) Remove the screw ① and remove the earth plate ②. Remove the sensor lever ⑦ and remove the ground plate ⑥. Remove the gear ③ and remove the metal bush ⑤ and Hopping Roller shaft Assy ❹.
(3) Remove the E-ring ⑪ and remove the one-way clutch gear ⑫ on the right side of the feed roller ⑩.

Note : The metal bush ⑬ also comes off. Be careful not to lose it.



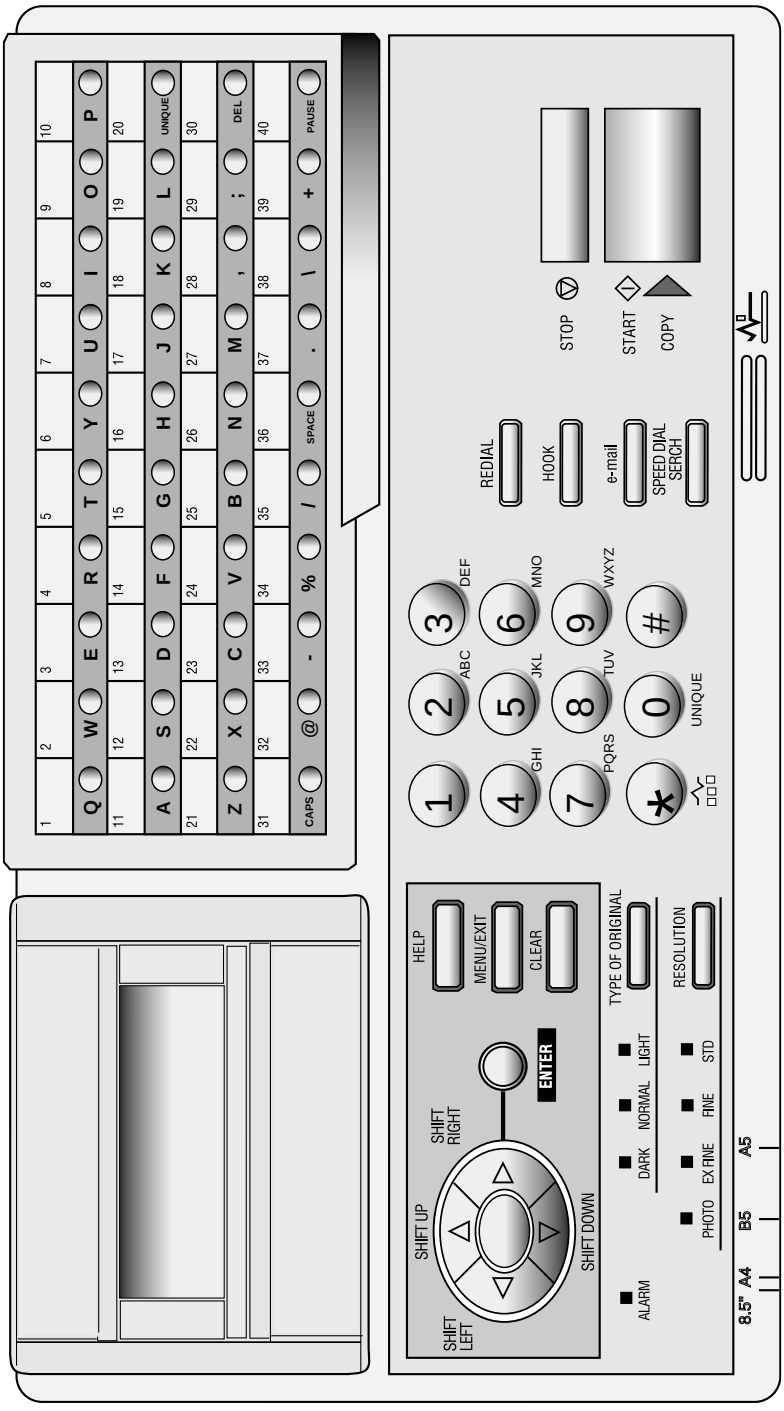
4. TROUBLESHOOTING

4.1 Precautions Prior to the Troubleshooting

(1) Go through the basic checking items provided in the facsimile Handbook.
(2) Obtain detailed information concerning the problem from the user.
(3) Go through checking in the conditions similar to that in which the problem occurred.

4.2 Preparations for the Troubleshooting

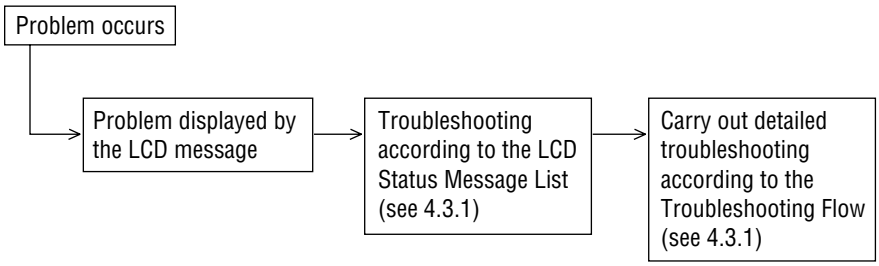
(1) Display on the Operator panel
The status of the problem is displayed on the LCD (Liquid Crystal Display) on the Operator panel. Go through the appropriate troubleshooting procedures according to the messages displayed on the LCD.



Control Panel of FX-056VP/176VP

4.3 Troubleshooting Method

When a problem occurs, go through the troubleshooting according to the following procedure.


Problem occurs
Problem displayed by the LCD message
Troubleshooting according to the LCD Status Message List (see 4.3.1)
Carry out detailed troubleshooting according to the Troubleshooting Flow (see 4.3.1)

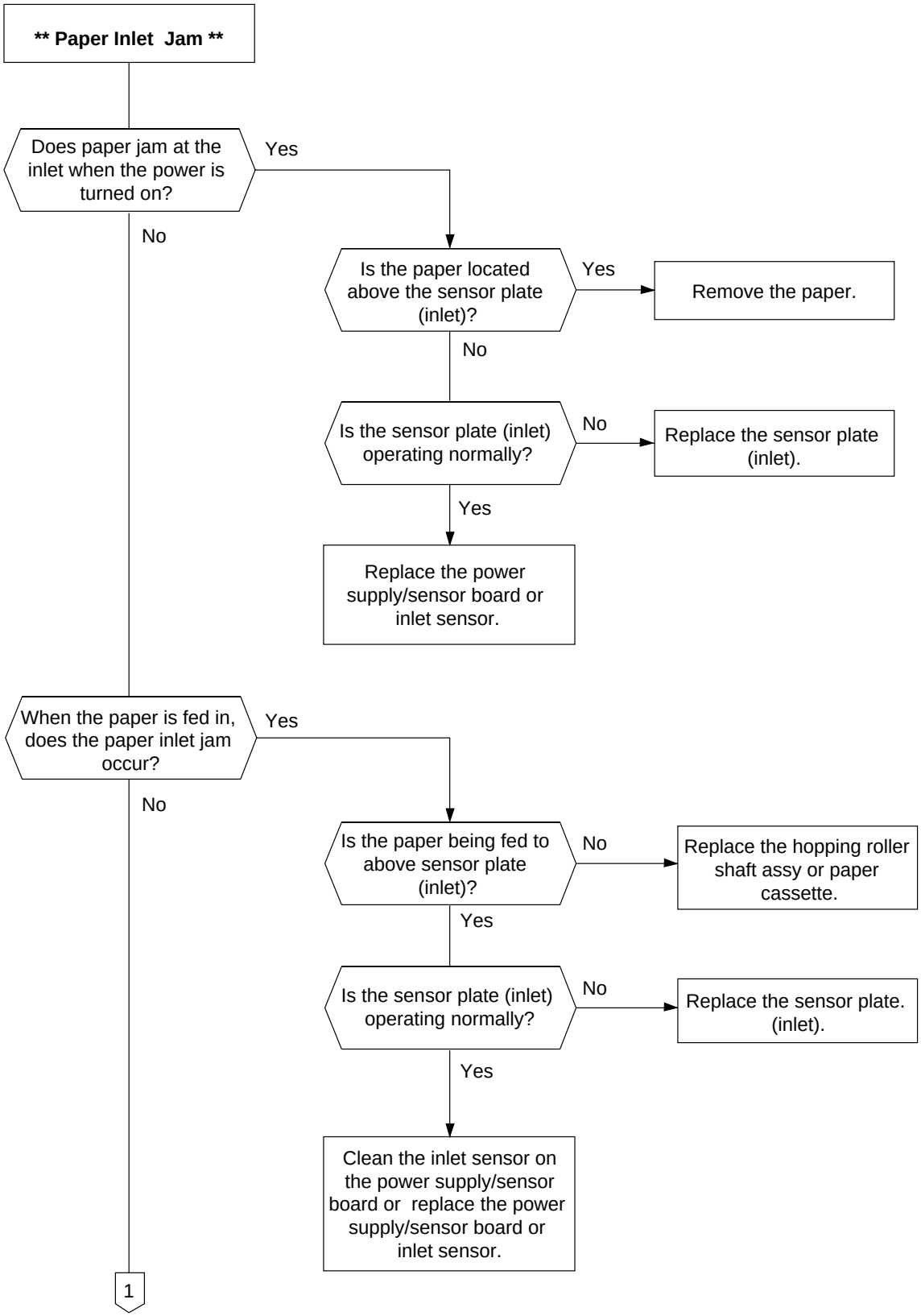
4.3.1 LCD Status Message List

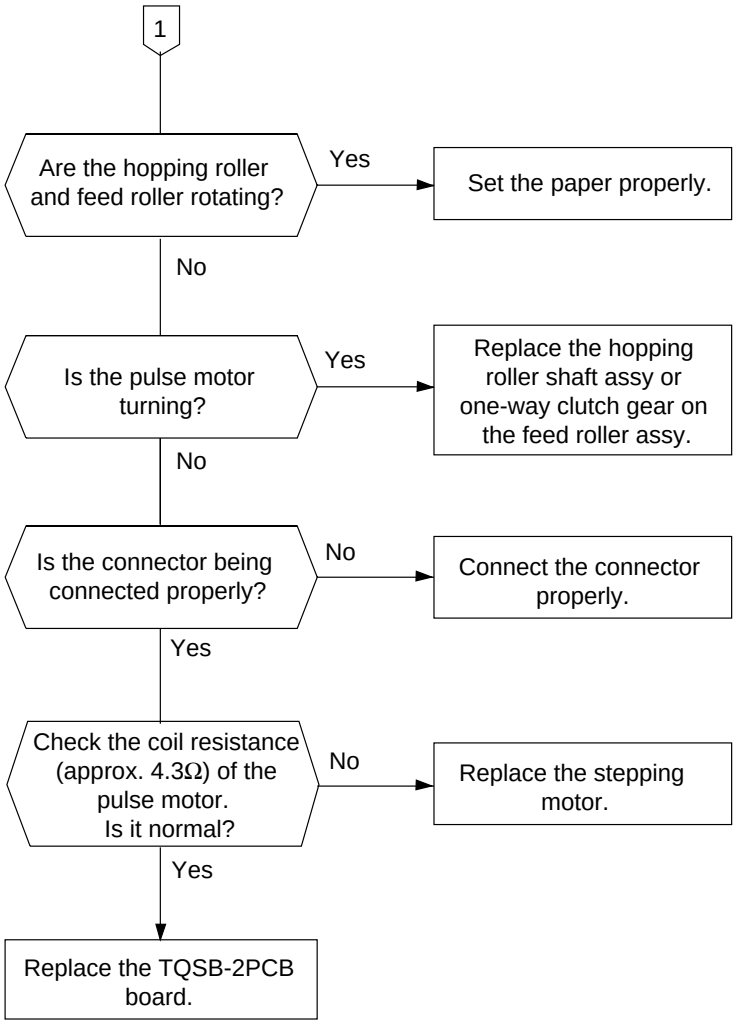
The listing of the statuses and problems displayed in the form of messages on the LCD is provided in Table 4-1.

Classification	LCD Status Message	Description	Recovery method
Jam error (feeding) *1	[redacted] 12:00 XXX PAPER MISS FEED MEMORY FREE 100%	Notifies of occurrence of jam while the paper is being fed from Second Paper Feeder.	• Check the paper in the Second Paper Feeder. Carry out the recovery printing by opening and closing the cover, and turn the error display off. • When the problem occurs frequently, go through the Troubleshooting.
Jam error (ejection)	[redacted] 12:00 XXX PAPER JAM MEMORY FREE 100%	Notifies of occurrence of jam while the paper is being ejected from the Second Paper Feeder.	• Check the paper in the Second Paper Feeder. Carry out the recovery printing by opening and closing the cover, and turn the error display off.
Paper size error	[redacted] 12:00 XXX PAPER SIZE ERROR MEMORY FREE 100%	Notifies of incorrect size paper feeding from Second Paper Feeder.	• Check the paper in the Second Paper Feeder. Also check to see if there was a feeding of multiple sheets. Carry out the recovery printing by opening and closing the cover, and turn the error display off.
Tray paper out *2	[redacted] 12:00 XXX NO PAPER MEMORY FREE 100%	Notifies of no paper state when both cassettes (1st and 2nd) has no recording paper.	• Load the paper in Second Paper Feeder.

*1: Indicates the same message on the display, when 1st or 2nd cassette becomes jam error (feeding).
*2: However, if 1st cassette has recording paper, LCD indicates the standby mode on the display and alarm message does not indicate.

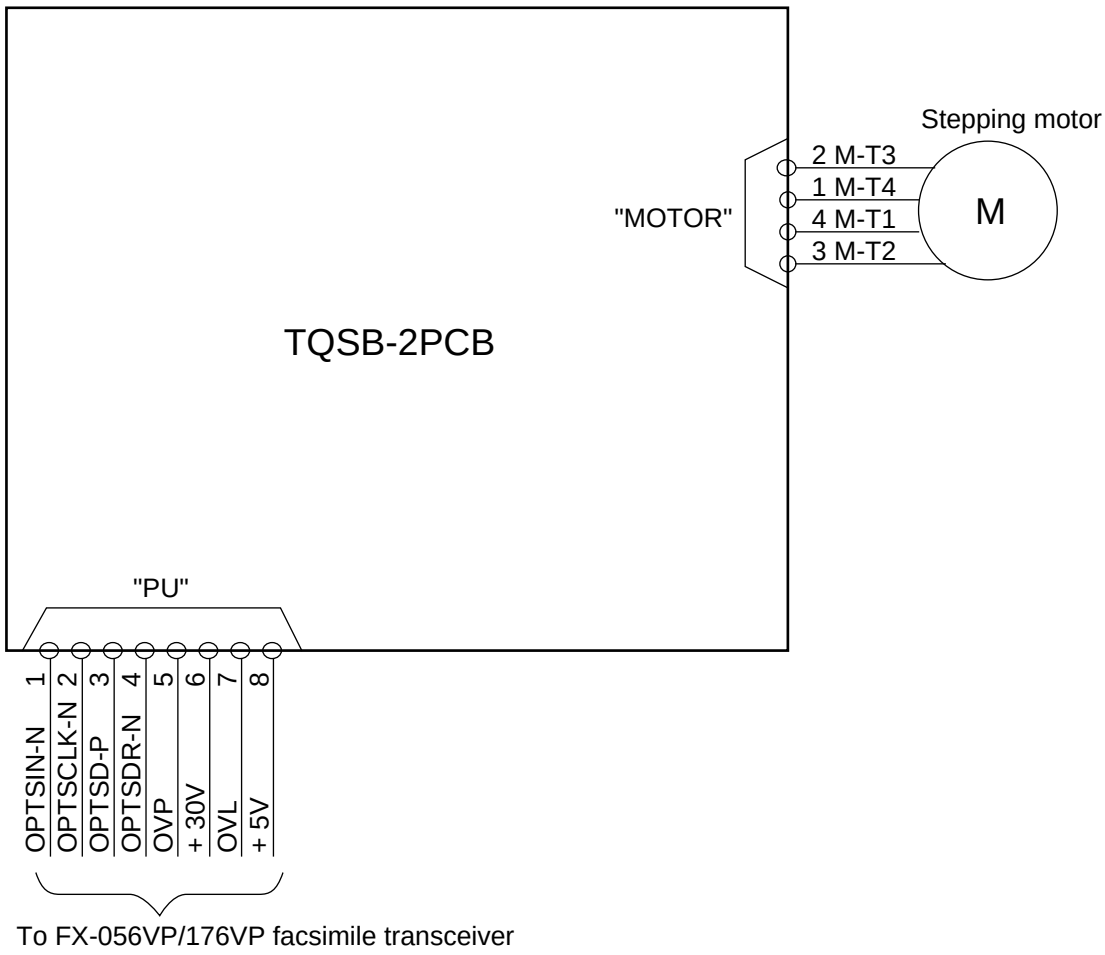
• (JAM error)


** Paper Inlet Jam **
Does paper jam at the inlet when the power is turned on?
Yes
No
Is the paper located above the sensor plate (inlet)?
Yes
Remove the paper.
No
Is the sensor plate (inlet) operating normally?
No
Replace the sensor plate (inlet).
Yes
Replace the power supply/sensor board or inlet sensor.
When the paper is fed in, does the paper inlet jam occur?
Yes
No
Is the paper being fed to above sensor plate (inlet)?
No
Replace the hopping roller shaft assy or paper cassette.
Yes
Is the sensor plate (inlet) operating normally?
No
Replace the sensor plate. (inlet).
Yes
Clean the inlet sensor on the power supply/sensor board or replace the power supply/sensor board or inlet sensor.
1


1
Are the hopping roller and feed roller rotating?
Yes
Set the paper properly.
No
Is the pulse motor turning?
Yes
Replace the hopping roller shaft assy or one-way clutch gear on the feed roller assy.
No
Is the connector being connected properly?
No
Connect the connector properly.
Yes
Check the coil resistance (approx. 4.3Ω) of the pulse motor. Is it normal?
No
Replace the stepping motor.
Yes
Replace the TQSB-2PCB board.

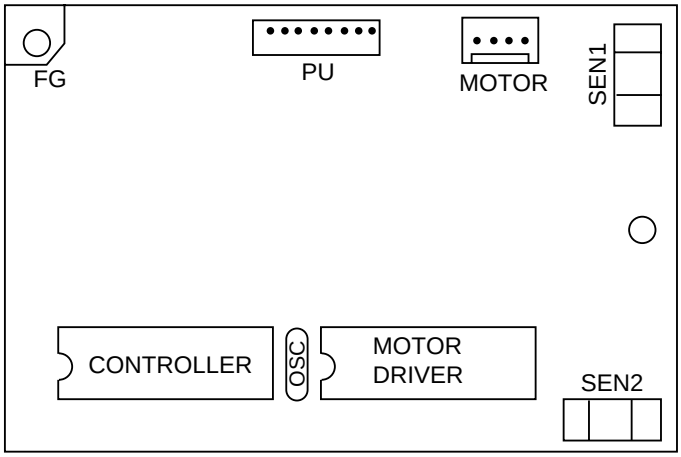
5. CONNECTION DIAGRAM

5.1 Interconnection Diagram



5.2 PCB Layout

TQSB-2PCB



6. PARTS LIST

SECTION1 CABINET & CASSETTE ASSEMBLY

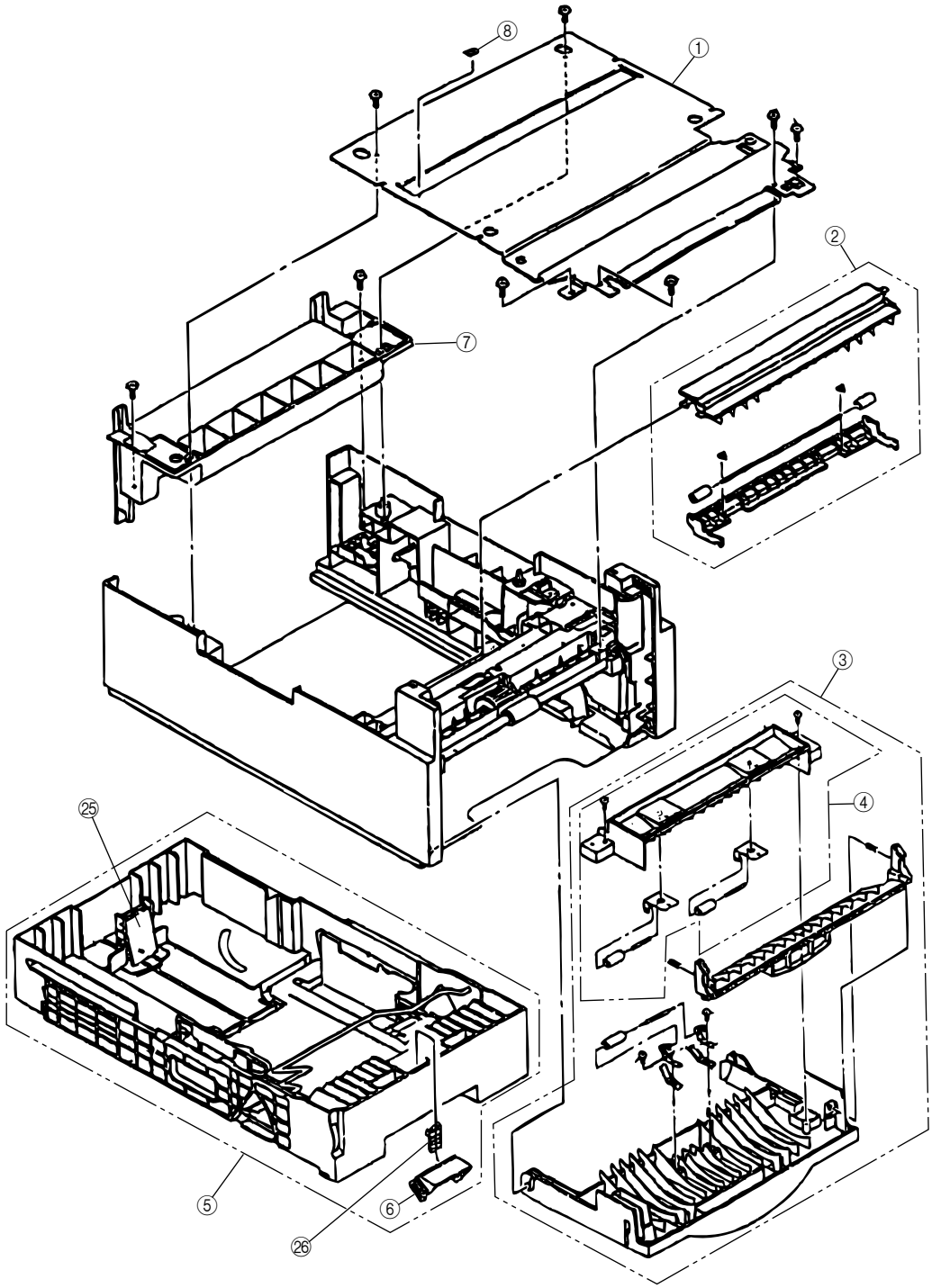


Figure 6-1

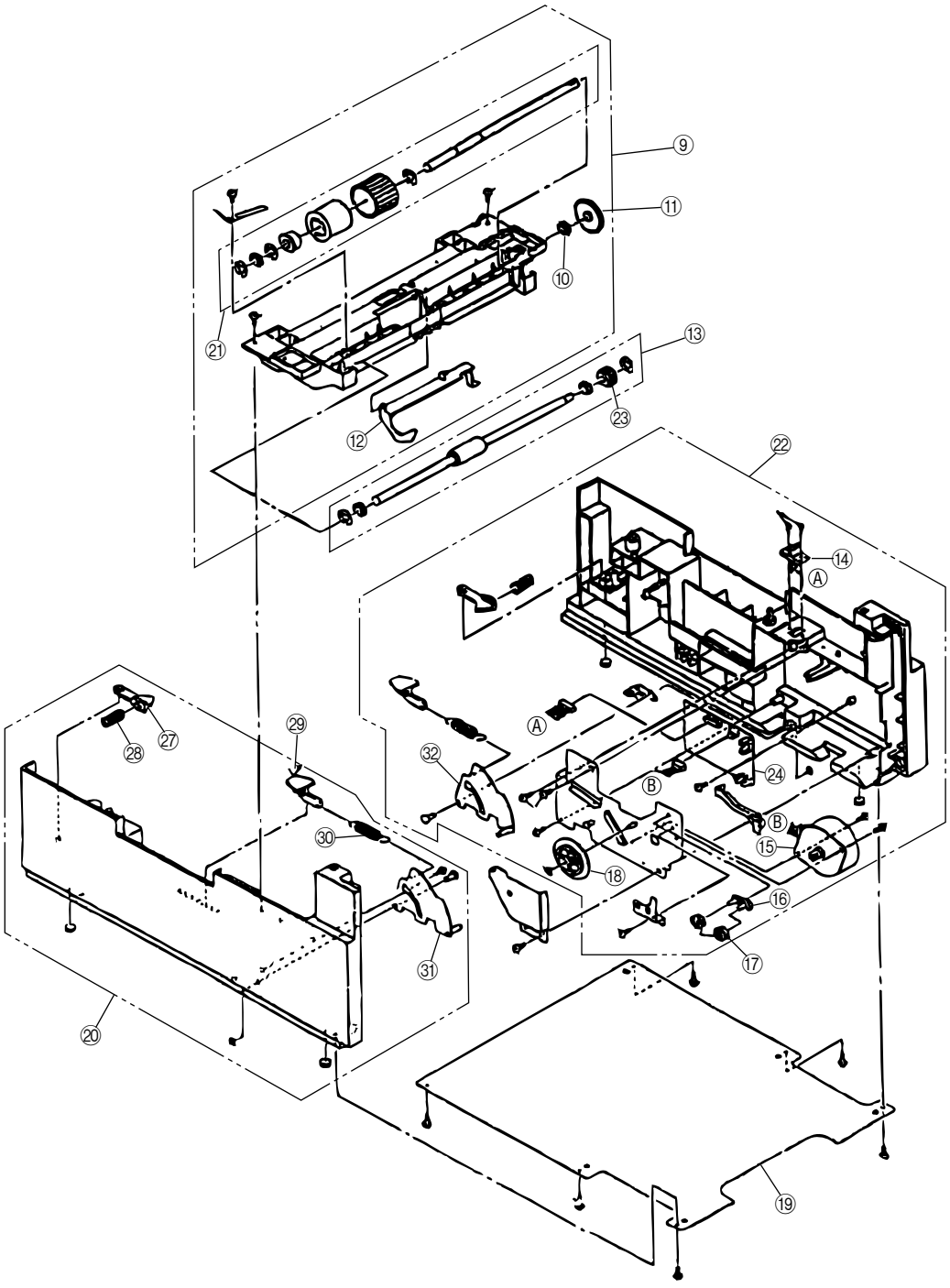


Figure 6-2

Table 6-1 Paper Feeder

No.	OKI Oarts Number	Description	Q'ty/U	Remarks
1	1PP4122-1401P001	Plate, Upper	1	
2	3PA4122-1370G001	Sheet Guide Assembly	1	
3	1PA4122-1369G001	Front Cover Assembly	1	
4	3PA4122-1371G001	Inner Guide Assembly	1	
5	1PA4122-1362G004	Cassette Assembly (2nd Tray)	1	
6	4PP4120-1009G001	Separation (F) Frame Assembly	1	
7	1PP4122-1323P001	Cover, Rear	1	
8	4PB4122-1441P001	Stick Finger	1	
9	1PA4122-1366G001	Hopping Frame Assembly	1	
10	4PP3522-3568P001	Bushing, Metal (ADF)	1	
11	4PP4122-1207P001	Gear (Z70)	1	
12	3PP4122-1331P001	Lever, Sensor (P)	1	
13	3PA4122-1393G001	Feed Roller Assembly	1	
14	3YS4111-3528P001	Cable & Connector	1	
15	3PB4122-1399P001	Stepping Motor	1	
16	4PP4122-1384G001	Bracket	1	
17	4PP4122-1383P001	Gear (Z24)	2	
18	4PP4122-1226P001	Gear (Z87/Z60)	1	
19	2PP4122-1389P001	Plate, Bottom	1	
20	1PA4122-1365G001	Second Cassette Guide (L) Assembly	1	
21	3PA4122-1367G001	Hopping Roller Assembly	1	
22	1YX4122-1364G002	Second Cassette Guide (R) Assembly	1	
23	4PB4122-1382P001	One-way Clutch Gear	1	
24	4YA4046-1651G002	TQSB-2 PCB	1	
25	3PA4122-1372G001	Tail Guide Assembly	1	
26	4PP4122-1238P002	Separation Spring	1	
27	4PP4122-1184P001	Cassette Lock Lever	1	
28	4PP4122-1347P001	Locks Spring	1	
29	4PP4122-1217P001	Pull Block	1	
30	4PP4122-1398P002	Sheet Spring	1	
31	4PP4122-1339G001	Sheet Link (L)	1	
32	4PP4122-1338G001	Sheet Link (R)	1	

Appendix G PC-LOADING

1. General

1.1 Application

This specification applies to the FX-056VP/176VP, an MFP unit capable of two-way communication using the parallel port as its standard feature.

1.2 General

This specification describes the details of PC loading through the Centro connector provided in the FX-056VP/176VP.
The functions covered are for loading by each of default data, flash memory program and language areas.

1.3 Note on Explanation

The terms used herein shall be interpreted as follows unless specified otherwise.

Term	Explanation
Transfer	Transmission from the PC to the FX-056VP/176VP
Receiving	Receiving from the PC to the FX-056VP/176VP
Loading data	Data in general that is transferred from the PC to the FX-056VP/176VP
Loading program	Program for receiving the data actually loaded to the FX-056VP/176VP
Transfer	Data transfer from the FX-056VP/176VP to the G4 board
FX-056VP/176VP main unit	Main unit of the FX-056VP/176VP excluding the option board
FX-056VP/176VP	Whole FX-056VP/176VP system including the option board
Option board PC loading data	Data transferred from the PC to the FX-056VP/176VP, that is, a option board loader or a option board program to be loaded
Option board loading program	Program that runs in the option board s DRAM to receive the option board program from the FX-056VP/176VP main unit.

2. Basic Operation

2.1 Supported Functions

The PC loading functions described herein are as follows.

1. Default data area loading function
2. Language area loading function
3. Flash memory area program loading function (The flash memory on the G3 Dual option board or ISDN option board is included.)

These PC loading functions are supported only when the OS used on the PC side is either MS-DOS Ver. 6.0 or above or PC-DOS Ver. 6.0 or above.

2.2 Differences from HSLS

It must be noted that PC loading through the Centro cable is different in the following points as compared with loading in the HSLS:

(1) While transition to the PC loading process is judged according to the presence/absence of the HSLS board, transition to PC loading is possible by detection of memory error occurrence and manual key operation this time.

(2) The header information is added anew to cope with the addition of the loading program as one of the loading data.

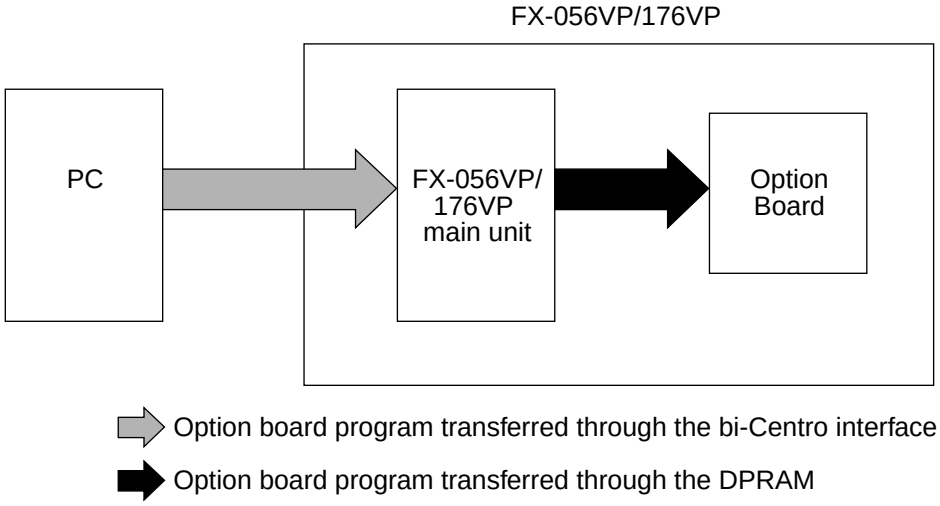
(3) There is no special application in this PC loading unlike the HSLS. Loading is performed by loading data output to the parallel port by means of a binary specification (copy/b).

(4) In the case of the HSLS, returning to normal standby state will not occur so long as the HSLS board is installed. In this system, on the other hand, the normal standby state is set automatically upon detection of the end of loading data by means of the header data.

(5) The cause of the error is displayed by the corresponding code upon occurrence of a hash NG or other error. For the code, see “6. List of Error Causes and Corresponding Codes.”

2.3 Option Board PC Loading

The option board PC loading data transferred from the PC through the bi-Centro cable is temporarily stored in the DRAM in the FX-056VP/176VP main unit. Next, this data is transferred to the G4 board through the dual port RAM (hereafter called the DPRAM).



2.3.1 Operating Conditions

1. Option board PC loading is started when the following operation is performed with a Option board installed in the FX-056VP/176VP main unit:

   - Operation of option board PC loading key when the FX-056VP/176VP is in the normal standby state

   Unlike the PC loading to the MCNT, there is no other methods for starting loading such as the method by which a special operation is performed. (For details on the key operation, see Section 2.2.1.3, “Operation Flow.”)

2. Since the option board PC loading function is performed using the program in the flash memory in the FX-056VP/176VP main unit, option board PC loading cannot be done when the machine does not start normally due to a flash memory hash error. (It is a matter of course that option board PC loading can be performed normally even if a flash memory hash error occurs on the option board side.)

3. The PC has no dedicated application for option board PC loading. Use a COPY command of MS(PC)-DOS along with a binary switch (copy/b) to output option board PC loading data through the parallel port.

4. When option board PC loading ends normally, control jumps to the initial process, getting into the normal standby state.

5. When an error such as a hash error occurs, its cause is displayed on the LCD. For error codes, see Chapter 6, “Error Causes and Codes.”

3. PC Loading Procedure

3.1 PC Loading upon Memory Error Occurrence

3.1.1 Explanation on Procedure

The PC loading procedure when the LCD on the FX-056VP/176VP displays “MEMORY ERROR” for a hash NG state due to one reason or another is explained below.

(1) Activate the MS(PC)-DOS with the host PC and the MFP connected via the Centro cable.

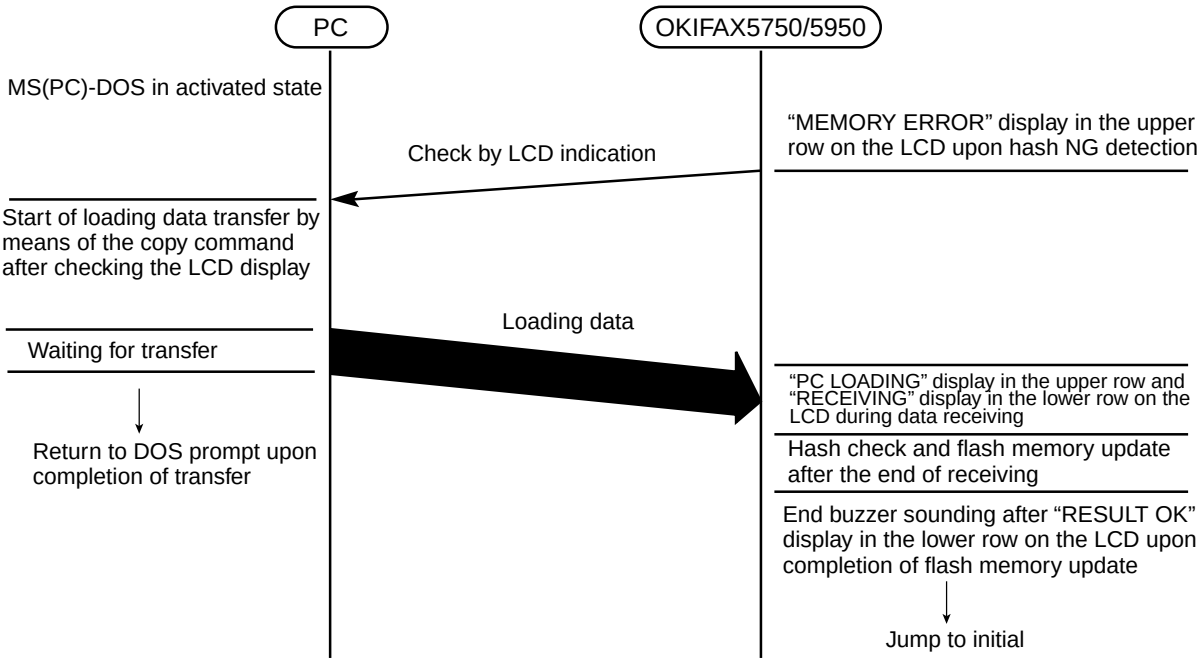
(2) Input the copy command from the MS(PC)-DOS on the PC to output the loading data file in binary specification to the LPT1 in order to transfer the loading data to the FX-056VP/176VP.

Example:

`>copy/b xxx.x LPT1` (xxx.x is the loading data file name.)

(3) The user shall judge the normal end of data loading by checking the normal end of file output on the PC and sounding of the buzzer indicating the normal end on the FX-056VP/176VP. If the FX-056VP/176VP displays an error on the LCD, sounds the buzzer for an error or lights up the alarm LED, the user shall judge abnormal end of data loading from the PC and repeat the procedure from step 2 after turning the FX-056VP/176VP power off once and to on again.

3.1.2 Procedural Sequence Diagram


PC
OKIFAX5750/5950
MS(PC)-DOS in activated state
“MEMORY ERROR” display in the upper row on the LCD upon hash NG detection
Check by LCD indication
Start of loading data transfer by means of the copy command after checking the LCD display
Loading data
Waiting for transfer
“PC LOADING” display in the upper row and “RECEIVING” display in the lower row on the LCD during data receiving
Return to DOS prompt upon completion of transfer
Hash check and flash memory update after the end of receiving
End buzzer sounding after “RESULT OK” display in the lower row on the LCD upon completion of flash memory update
Jump to initial

3.2 PC Loading by Manual Operation

3.2.1 Explanation on Procedure

Loading shall be performed as shown below when the PC loading function is selected by key operation by a service man.

(1) Activate the MS(PC)-DOS with the host PC and the FX-056VP/176VP connected via the Centro cable.

(2) Input the copy command from the MS(PC)-DOS on the PC to output the loading data file in binary specification to the LPT1 in order to transfer the loading data to the FX-056VP/176VP.

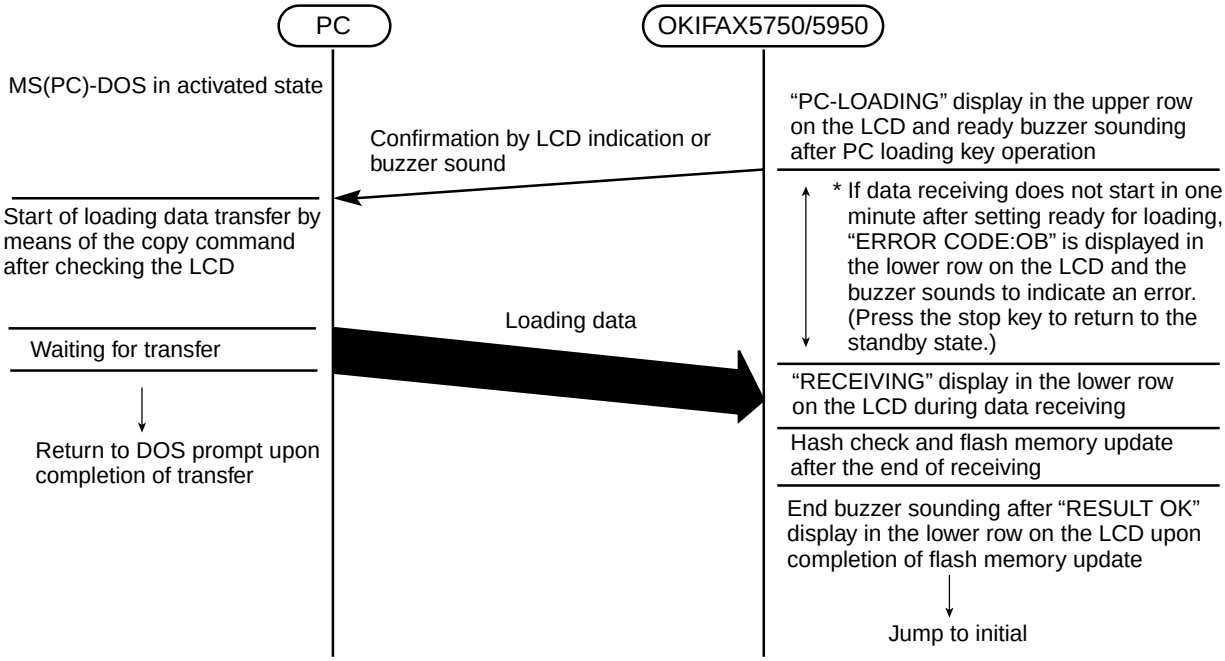
Example:

```
>copy/b xxx.x LPT1
```

(xxx.x is the loading data file name.)

(3) The user shall judge the normal end of data loading by checking the normal end of file output on the PC and sounding of the buzzer indicating the normal end on the FX-056VP/176VP. If the FX-056VP/176VP displays an error on the LCD, sounds the buzzer for an error or lights up the alarm LED, the user shall judge abnormal end of data loading from the PC and repeat the procedure from step 2 after turning the FX-056VP/176VP power off once and to on again. (See “6. List of Error Causes and Corresponding Codes” for the error cause.)

3.2.2 Procedural Sequence Diagram

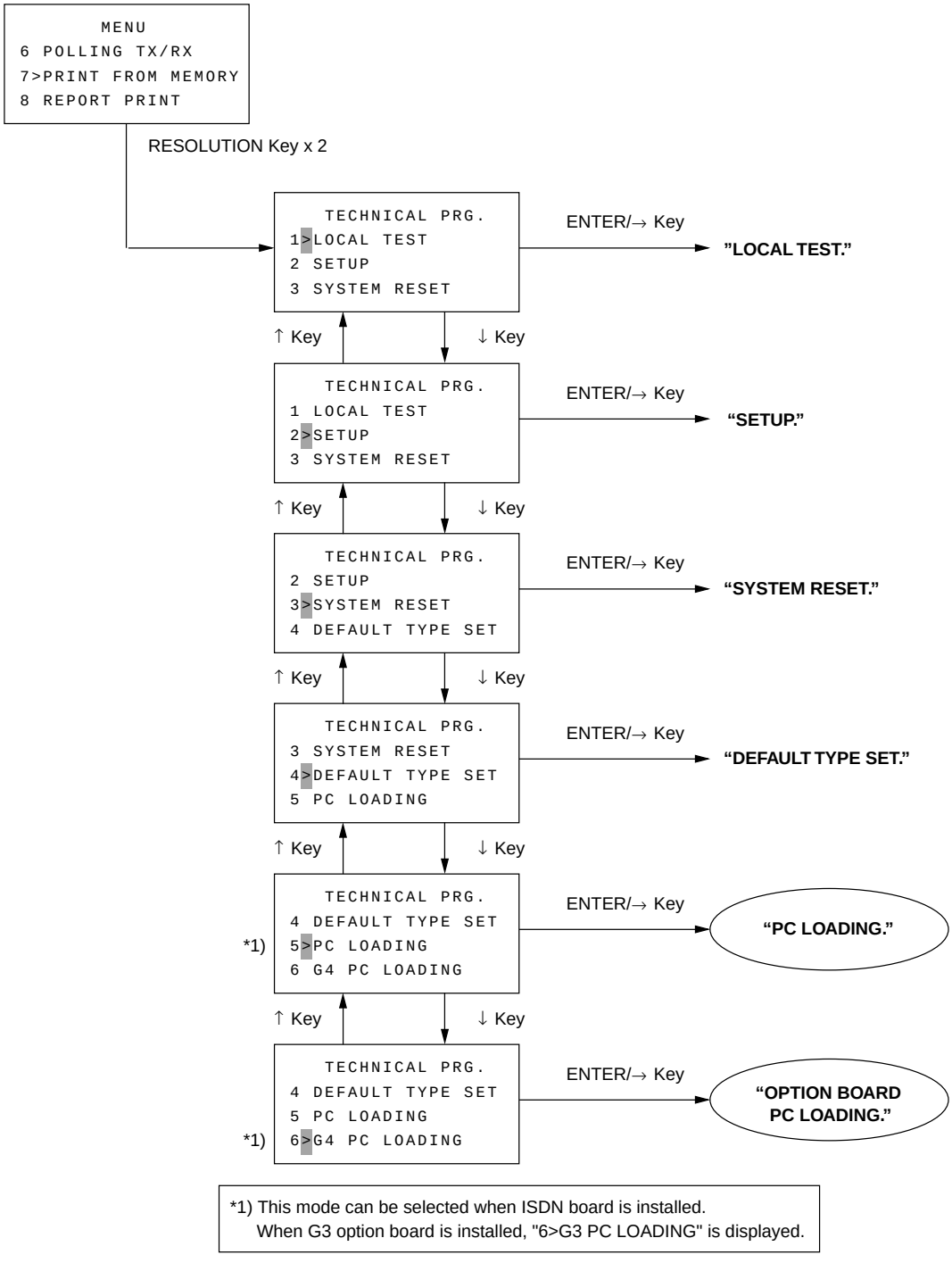

PC
OKIFAX5750/5950
MS(PC)-DOS in activated state
“PC-LOADING” display in the upper row on the LCD and ready buzzer sounding after PC loading key operation
Confirmation by LCD indication or buzzer sound
* If data receiving does not start in one minute after setting ready for loading, “ERROR CODE:OB” is displayed in the lower row on the LCD and the buzzer sounds to indicate an error. (Press the stop key to return to the standby state.)
Start of loading data transfer by means of the copy command after checking the LCD
Loading data
Waiting for transfer
“RECEIVING” display in the lower row on the LCD during data receiving
Hash check and flash memory update after the end of receiving
End buzzer sounding after “RESULT OK” display in the lower row on the LCD upon completion of flash memory update
Return to DOS prompt upon completion of transfer
Jump to initial

3.2.3 Operation Flow

• PC Loading

1) The machine is standby state with no document.
2) Press rhe MENU key once.
3) Press the RESOLUTION key twice.
   The display will be shown the “TECHNICAL PRG”.
   • Press the SHIFT DOWN (↓) key four times.
   • The menu option “5 PC LOADING” indicated by the blinking cursor is selected, and press the ENTER/SHIFT RIGHT (→) key.

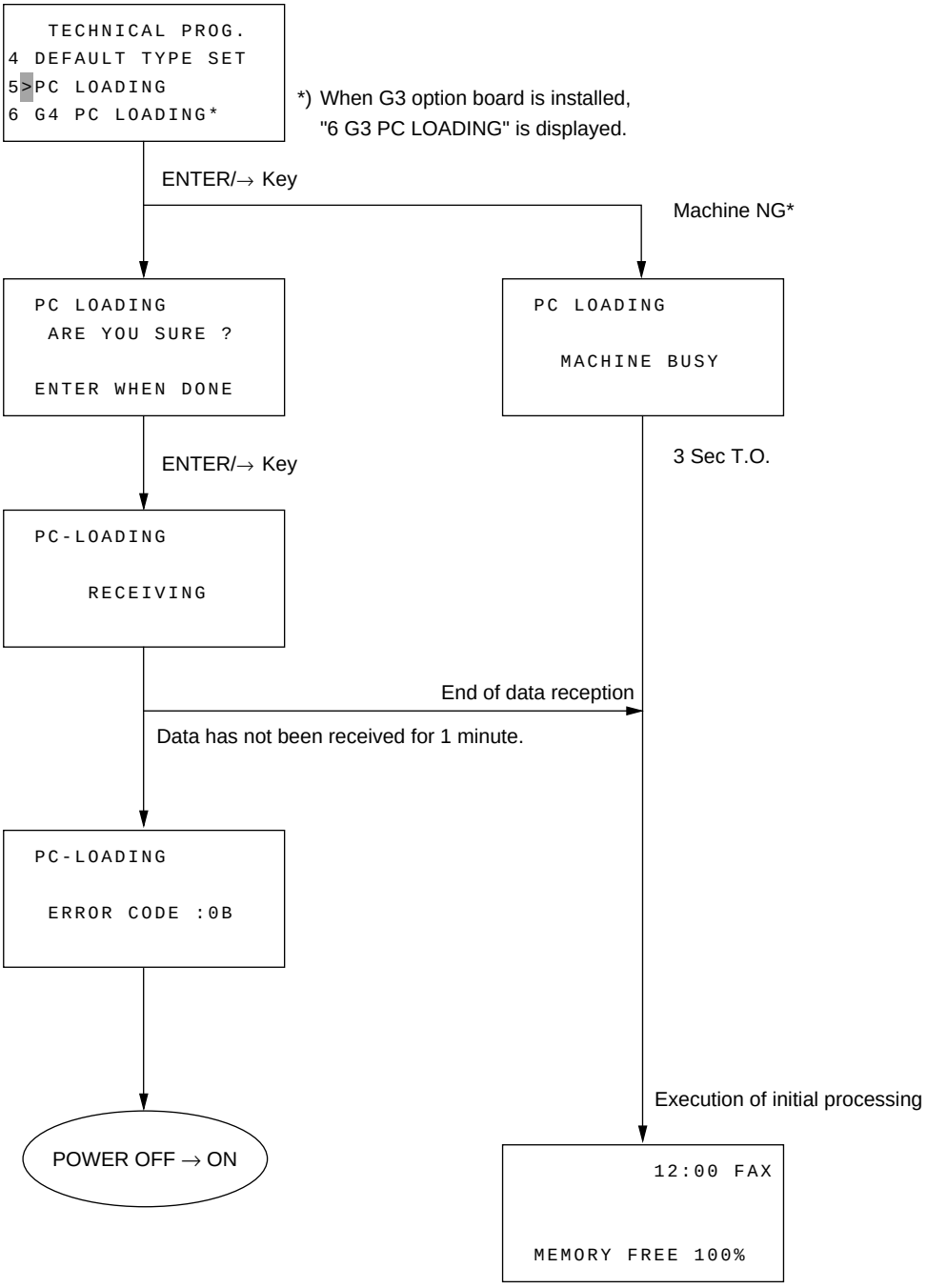
Note: This mode can be selected when ISDN board is installed.



*1) This mode can be selected when ISDN board is installed.
When G3 option board is installed, "6>G3 PC LOADING" is displayed.

PC Loading Flow

PC Loading automatically rewrites the program stored in the machine by using PC. This function is only for serviceman.



*:Memory data exists, redial is being waited, document reserved to be transmitted exists, a machine alarm (excluding no paper, toner low and no ID alarms), or the telephone is off-hooked.

3.3 Option Board PC Loading Procedure

3.3.1 Explanation of Procedure

The option board PC loading procedure is explained below assuming that the FX-056VP/176VP system is normal.

1. With the host PC connected to the FX-056VP/176VP (having a G4 board) through a Centro cable, turn on the PC and then FX-056VP/176VP.

2. Start MS(PC)-DOS on the PC, then perform the G4 board PC loading start key operation on the FX-056VP/176VP. (Make sure “PC-LOADING” is displayed on the LCD on the FX-056VP/176VP system and the “Ready” buzzer sounds.)

3. Execute an MS(PC)-DOS command “COPY” along with a binary switch on the PC to output the G4 board PC loading data file to the LPT1. Thus, the loading data can be transferred to the FX-056VP/176VP.

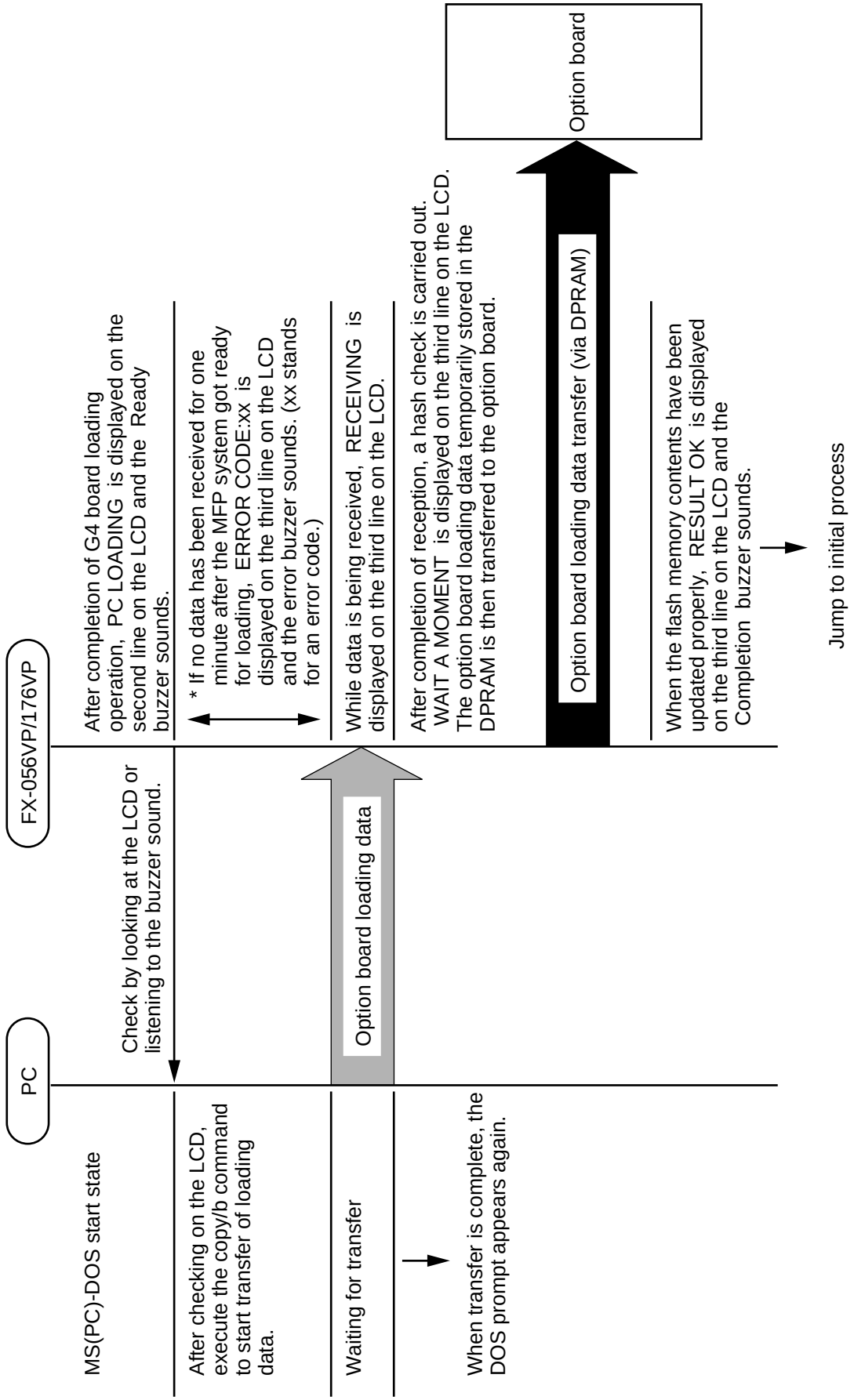
   Example: >copy/b xxx.x LPT1 (xxx.x is a loading file name.)

4. Look at the message on the LCD and listen to the “FX-056VP/176VP normal end” buzzer to check that option board PC loading has been competed normally. If the FX-056VP/176VP displays an error code on the LCD, issues an error buzzer, or turns on an alarm LED, power the FX-056VP/176VP off and on again to perform the above steps again assuming that a PC loading error has occurred.

Caution!

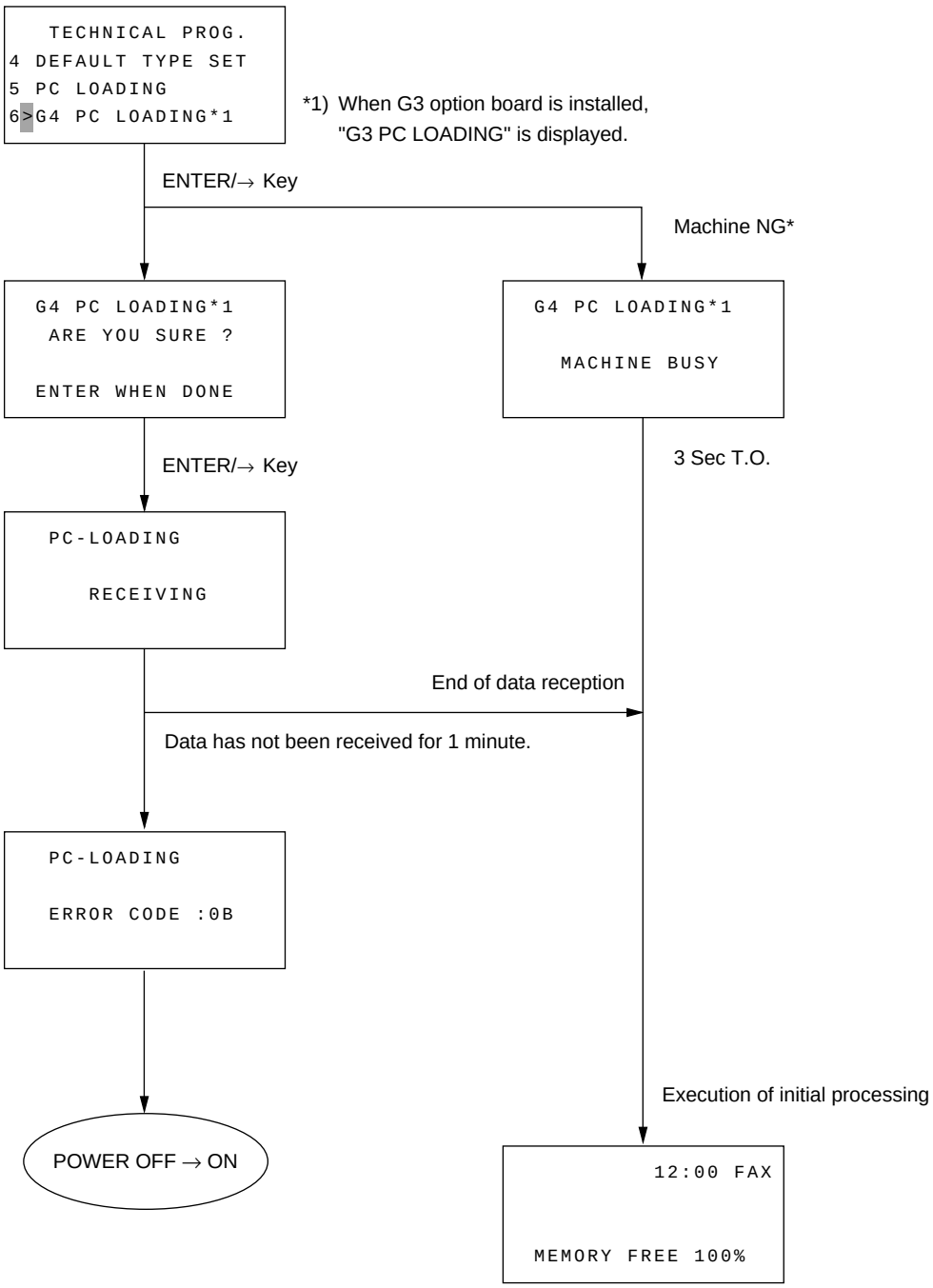
Even if a option board memory error or a option board flash memory contents error occurs together with a hash match error (i.e., runaway), option board loading can be performed following the procedure mentioned above.

3.3.2 Sequence Diagram


PC
FX-056VP/176VP
Option board
MS(PC)-DOS start state
Check by looking at the LCD or listening to the buzzer sound.
After completion of G4 board loading operation, PC LOADING is displayed on the second line on the LCD and the Ready buzzer sounds.
* If no data has been received for one minute after the MFP system got ready for loading, ERROR CODE:xx is displayed on the third line on the LCD and the error buzzer sounds. (xx stands for an error code.)
After checking on the LCD, execute the copy/b command to start transfer of loading data.
Option board loading data
While data is being received, RECEIVING is displayed on the third line on the LCD.
After completion of reception, a hash check is carried out. WAIT A MOMENT is displayed on the third line on the LCD. The option board loading data temporarily stored in the DPRAM is then transferred to the option board.
Option board loading data transfer (via DPRAM)
Waiting for transfer
When transfer is complete, the DOS prompt appears again.
When the flash memory contents have been updated properly, RESULT OK is displayed on the third line on the LCD and the Completion buzzer sounds.
Jump to initial process

3.3.3 Option board PC Loading Flow

Option board PC Loading automatically rewrites the program stored in the machine by using PC. This function is only for serviceman.



*:Memory data exists, redial is being waited, document reserved to be transmitted exists, a machine alarm (excluding no paper, toner low and no ID alarms), or the telephone is off-hooked.

4. LCD Messages

The LCD message in each operation state is shows below. Note that each message does not vary with the default type or language type.

(1) Upon transition to PC loading function

Transition by manual operation

```
PC LOADING
```

Transition by a memory error

```
MEMORY ERROR
```

(2) During data receiving before loading end buzzer sounding

```
PC-LOADING
   RECEIVING
```

(3) During loading end buzzer sounding

```
        12:00 FAX

MEMORY FREE 100%
```

(4) Upon error occurrence during loading

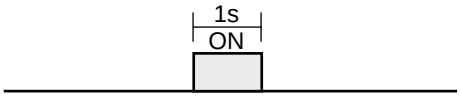
```
PC-LOADING
ERROR CODE :0B
```

"**": Error code (See "6. List of Error causes and Corresponding Codes.")

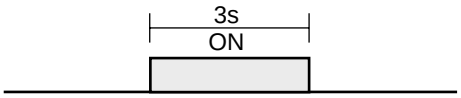
5. Buzzer Sounding Patterns

The buzzer sounding patterns for various cases are shown below. In each case, the buzzer frequency is 2,400 Hz and the sound volume is maximum.

5.1 Upon Start of PC Loading



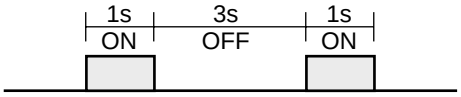
5.2 Upon Normal End



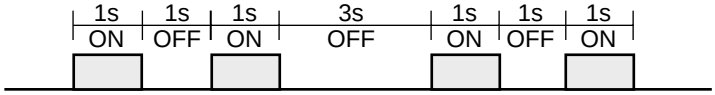
5.3 Upon Error Occurrence

The following sounding patterns are provided for indicating various error causes. Intermittent sounding is repeated until the FX-056VP/176VP power is turned off. See “6. List of Error Causes and Corresponding Codes” for details of the error causes and codes.

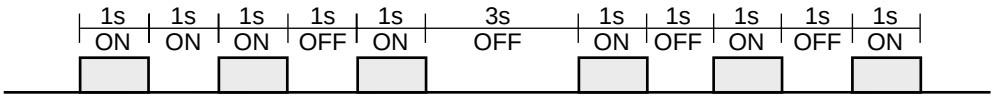
(1) Receive data hash check NG (error code: “01”)



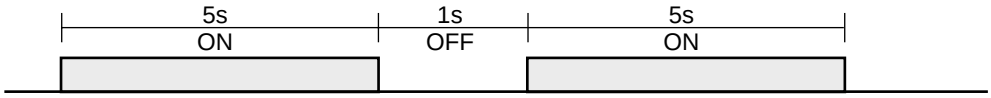
(2) Flash memory erase/write NG (error code: “02”)



(3) Disagreement between contents of flash memory and external RAM (error code: “03”)



(4) Other error (error code: other than above)



6. List of Error Causes and Corresponding Codes

The table below lists the error causes likely to occur during PC loading and the corresponding codes. When an error occurs, the corresponding error code is displayed, the buzzer sounds in the corresponding pattern and transition to the permanent loop state occurs. (See Note 1.)

See “4. LCD Messages” and “5. Buzzer Sounding Patterns” for the LCD display and buzzer sound upon occurrence of each error.

		CODE
1	Timeout of data receiving waiting timer (14 seconds)	00
2	Loading data hash check error	01
3	Flash memory erase/write error	02
4	Disagreement between flash memory and external RAM contents (verify error)	03
5	Header sum check NG *1	04
6	Disagreement between loading machine type and machine identifier in header *1	05
7	Designation of unspecified parameter in header *1	06
8	Extended address record sum check NG *2	07
9	Data record sum check NG *2	08
10	Start address record sum check NG *2	09
11	File end record sum check NG *2	0A
12	Timeout by failure in normal data receiving for 1 minute in loading waiting state after operation	0B
13	RAM check result NG upon starting loading program processing	0C
33	The data reception wait timer (14 seconds) has expired during data transfer from the PC to the FX-056VP/176VP main unit.	20
34	A received data hash check error has occurred in the FX-056VP/176VP main unit.	21
35	On the option board side, an error has occurred during flash memory data erasure/write.	22
36	On the option board side, updated flash memory contents do not mach the contents of source DRAM.	23
37	The option board has detected setting of an invalid value in the DPRAM length area on the FX-056VP/176VP main unit side.	24
38	The option board has detected setting of an invalid value in the DPRAM status area on the FX-056VP/176VP main unit side.	25
39	Reserved	26
40	On the FX-056VP/176VP main unit side, normal data has not been received for one minute after start of option board PC loading.	27
41	On the option board side, a header sum check error has occurred.	28
42	On the option board side, a loading data hash check error has occurred.	29
43	On the option board side, a header parameter specification error has occurred.	2A
44	On the FX-056VP/176VP main unit side, the option-board-side DPARM status response state has been maintained for 3 minutes or longer.	2B
45	On the option board side, a DRAM check error has occurred.	2C
46	The FX-056VP/176VP main unit has detected setting of an invalid value on the option board side.	2D
47	On the option board side, the local machine type does not match the header s type identifier.	2E

*1. Occurs only in binary format specification.
*2. Occurs only in Intel HEX code specification (reservation code not actually used).

(Note 1)

No error processing (transition to permanent loop state after error code display and buzzer sounding in corresponding pattern) occurs when any of the following errors occurs in receiving the loading program header. The receive data until error occurrence is discarded and the program header receiving starts from the beginning again.

(1) Header sum check NG
(2) Disagreement between loading machine type and machine identifier in header
(3) Designation of unspecified parameter in header
(4) Designation of other than loading program as data type identifier in header
(5) Designation of no succeeding data in descriptor
(6) Designation of Intel HEX format as data type
(7) 14 seconds timeout in header receiving end waiting state

7. Cautions

(1) Execute the copy command for PC loading after sounding of the buzzer indicating the ready state for loading (for about 1 second). Since the buzzer does not sound for PC loading upon memory error detection, however, execute the copy command after checking “MEMRY ERROR” indication on the LCD after power on.

(2) Even after returning to the DOS prompt state after the end of the copy command on the PC, do not turn the FX-056VP/176VP power off until the buzzer indicating the end of FX-056VP/176VP loading sounds.

8. Loading Processing Time

The processing time for reloading in the whole FX-056VP/176VP area (program 1, language and default) is shown below.
Use the value only as reference since the transfer time varies with each type of PC.

8.1 Main Board

Measuring conditions:

Flash memory:	MBM29F800T (non-cleared state)
Transfer file version:	AAx_

Result:

Time for transfer from PC to FAX main unit:	Approx.	93 seconds*
Flash memory update time:	Approx.	40 seconds

* Conditions:
- Pentium MMX 233MHz
- File transfer from Hard Disk
- MS-DOS: Copy command

8.2 Option (ISDN, G3) Board

Time for transfer from PC to FAX Option Board: About 60 seconds.

APPENDIX H RMCS SYSTEM MANUAL (For Model 40)

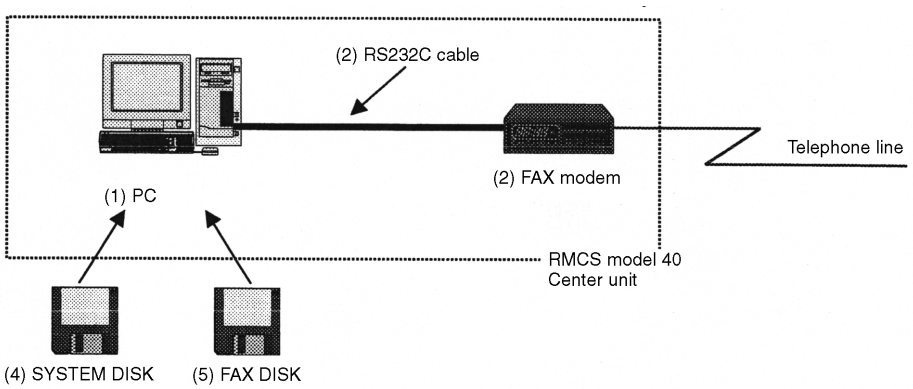
1. Notes to RMCS user

1.1 Introduction

RMCS stands for the Remote Management Center System. The purpose of this system is to speed up customer service and reduce maintenance costs.

1.2 System Configuration of RMCS MODEL40

System configuration of RMCS Model 40 is shown below. PC, FAX Modem are needed for the system.



(1) PC: IBM PC or compatible PC with Windows95/98/Me, Windows NT4.0 or Windows 2000.
(2) FAX modem: Any FAX modem be accessed by a serial port of Windows system. To achieve the good stability and performance, the four FAX modems shown in Table-1 are recommended, which have been tested during development.
(3) RS232C cable: In case the FAX modem needs the cable to attach to the PC
(4) SYSTEM DISK: To install this system and FAX DISKs.
(5) FAX DISK: FAX DISK corresponds to each FAX model. This software includes default data and communication control program for the target model of FAX machine.

1.3 Required System

The RMCS (Remote Management Center System) for Win must be installed in the PC that has Windows-OS installed in order to run maintenance works from a remote location by using the RMCS for Win.
The PC system, in which the RMCS for Win is installed and executed for maintenance works, differs depending on the operation system.
The following system configuration is required to use the RMCS for Win.

OS	Windows95 (OSR2~)	Windows98/Me	WindowsNT4.0 with Service Pack 4 or higher	Windows2000
CPU	Pentium 166MHz or higher			
Memory	32MB or higher			
Hard Disk	20MB or higher of free space			
Monitor Resolution	640 dots × 480 dots or higher			
Recommended Fax Modem	1. U.S.Robotics 56k faxmodem - External Model #5686 2. 3. 4.			

2. Quick Set-up manual for RMCS Model 40

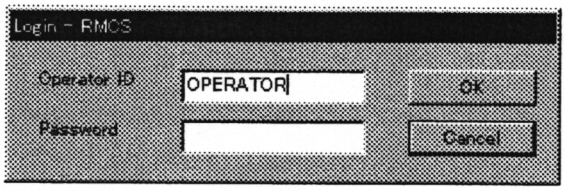
2.1 RMCS Installation

1) Insert the disk to set up the RMCS in the drive.
2) Start up Installer.
3) Execute installation by following the SETUP screen.
   * You can set an operator password during Install.
   * You can skip password registration.
   * You can use up to 15 alphanumeric characters to set up a password.
   * You can change the registered password after installation.
   * You can enter up to 15 alphanumeric characters for a password.

3. Startup

3.1 Entering Operator ID

As the RMCS MODEL 40 starts up, you are queried for entering an operator ID.
You can confirm the operator ID you entered on the System Main screen or the Model Main screen after the RMCS started up.

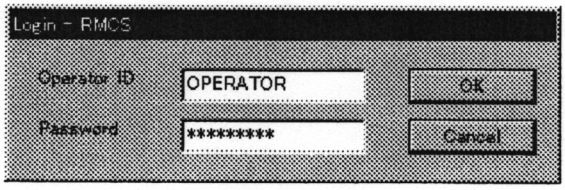


* You can enter up to 50 alphanumeric characters for operator IDs.
* If you want to change the operator ID, you must exit RMCS first, then re-boot it.

3.2 Entering Password

You are queried for entering a password at the same time as entering an operator ID.

1) Enter an operator password.
   * Enter the password that was registered during installation of the RMCS for Win or the password modified later.
   * If no password has been registered, you need not input any herein.

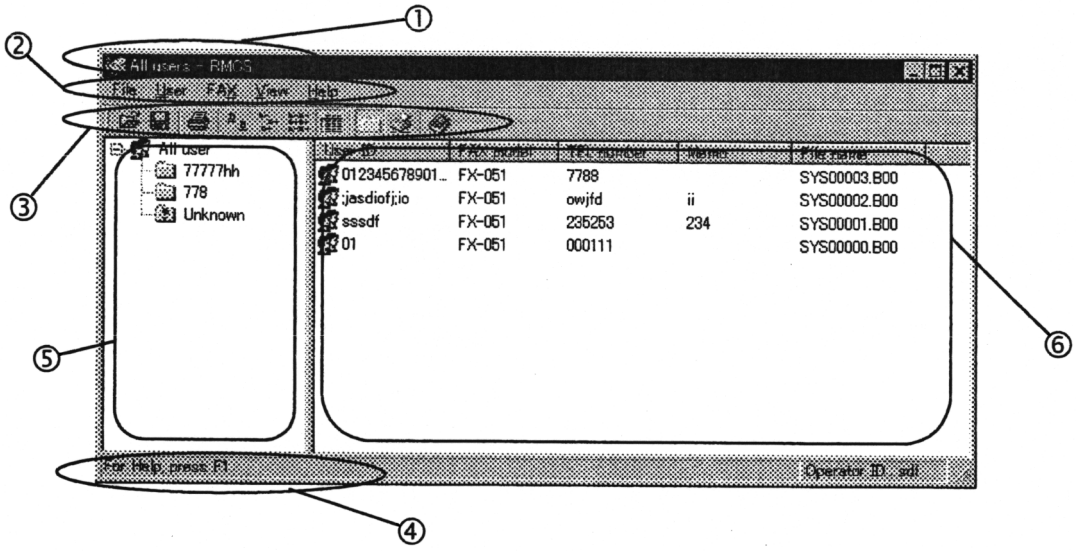


2) Press the OK button.
   * If you enter the password incorrectly three times, the RMCS closes and it does not boot up.

4. SYSTEM Main Screen

4.1 Screen Titles

Once the RMCS for Win is booted, the System Main screen appears.
The titles used in the System Main screen are explained next.



① Title Bar:
Displays the folder names that are displayed on the User Display window.

② Menu Bar:
Displays the menu that executes the various functions.

③ Toolbar:
Displays by the icons the functions that you can execute by clicking.
You can switch Toolbar display/not display on the View Menu.

④ Status Bar:
Displays the status of RMCS, Menu descriptions, and also operator ID.
You can switch Status bar display/not display on the View menu.

⑤ Users (RMCS users) Category Window:
Displays the facsimile models that are currently registered, or the folders that the operator has customized.
You can switch the display by the facsimile models or by the folders, on the View menu or by the icons on the Toolbar.

⑥ Users (Field users) Display Window
Displays all users that are currently registered.
You can switch Large Icons, Small Icons, List and Details, on the [View] menu or by the icon on the Toolbar.

4.2 DISK by Models

4.2.1 Adding Models

You must run Install by using the DISK by the models and add models to run maintenance on the facsimile devices. The procedure is explained next.

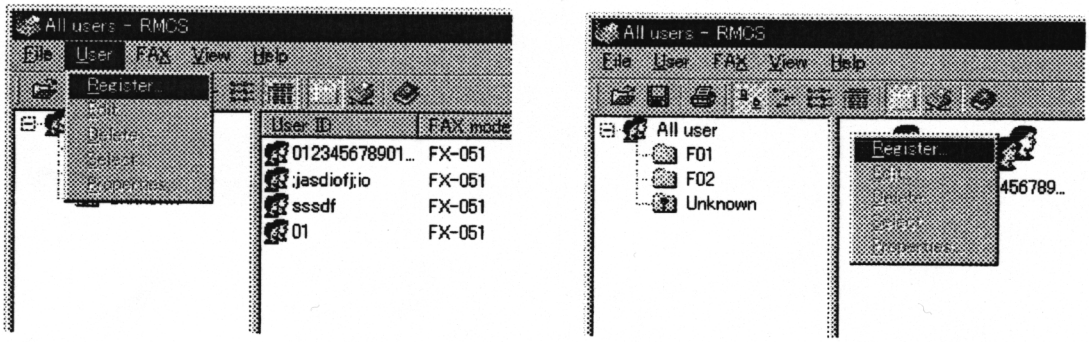
(1) Insert the DISK by the facsimile models in the drive.
(2) Select [Install] on the [FAX] menu.
(3) Select on the Dialog screen the drive where you have inserted the DISK by the facsimile models.
(4) Press the OK button.
(5) Confirm the facsimile device you want to add has been added to the User Category window at the System Main screen.

4.3 Manipulating User Information

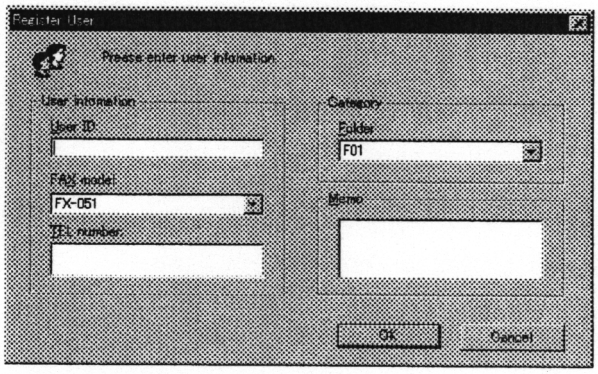
4.3.1 Registering User Information

You must register user information to run maintenance works.

1) Select a folder you want to register at the User Category window.
2) Select [Register] on the [User] menu.
   * You can select by right clicking at the User Display window.



3) The Register Dialog screen appears.
4) Enter each item and press the OK button.



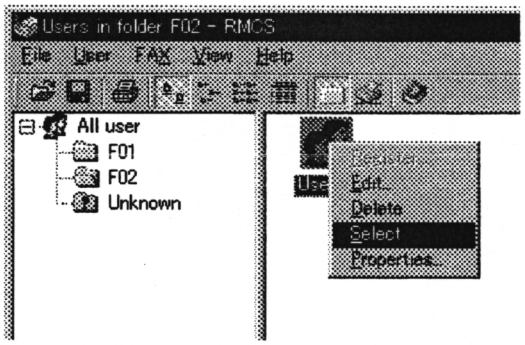
* The following four items are subject to registration.
  1. User ID: Enter up to 15 alphanumeric characters (must)
  2. FAX model: Select on the Pull-down menu. (must)
  3. TEL number: Enter a TEL number of up to 48 digits. (must)
  4. Fold: Select on the Pull-down menu. (choice)
  5. Memo: Enter up to 50 alphanumeric characters (choice)

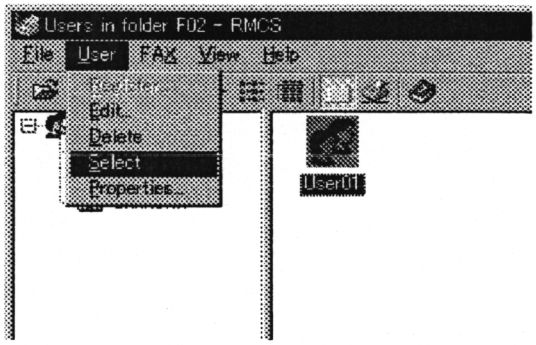
* You cannot register by the User ID name that is already registered.

4.3.2 Selecting User Information

To select the user information subject to maintenance so as to move to the Model OFFLINE screen.

1) Select the user information on which you want to run maintenance at the User Display window.
2) Select [Select] on the [User] menu.
   * You can select by right clicking at the All Users window.
   * You can select by double clicking at the level when user information is selected.



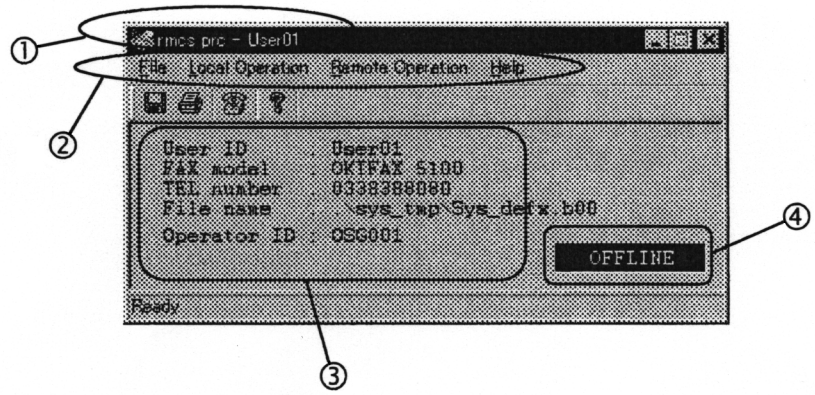


3) The Model OFFLINE screen appears.

5. Model Main Screen

5.1 Screen Title

When User Information is selected at the RMCS for Win SYSTEM Main screen, the Model Main screen appears.
The Model Main screen is explained next.



① Title Bar:
To display the facsimile model name

② Menu Bar:
To display the menu at which each function is executed

③ Area to display user information and operator information:
To display user information and operator IDs to set/display/edit

④ ONLINE/OFFLINE display:
To recognize ONLINE/OFFLINE status of setup information currently displayed

5.2 ONLINE Operation

Select items on the [Remote Operation] menu, to run ONLINE operations through the communication circuit.

1) Change the telephone number, if necessary, at the [TEL number setting] sub-menu on the [Local Operation] menu.
2) Select items on the [Remote Operation] menu.

Initialization of FAX
File [LOAD (→ FAX)]
File [SAVE (→ HD)]
[EDIT] (ON LINE)
Testing
Disconnect

3) Confirm that ONLINE is displayed at the Model Main screen.

5.2.1 Loading

To load file-format data from the RMCS (maintenance work PC) to the target FAX device.
The data in the target FAX device is replaced with the loaded data.

1) Select items to load at the [File[LOAD(→FAX)]] sub-menu on the [Remote Operation] menu.

All data
User data
Serviceman data
TEL number data
Program/Language/Default data

2) (File loading.)
3) Select the [Disconnect] sub-menu on the [Remote Operation] menu to close the circuit.
   * You can select a new item on the [Remote Operation] menu without disconnecting the line.
4) Confirm that OFFLINE is displayed on the Model Main screen.

5.2.2 Saving

To upload the file-format data from the target FAX device in the RMCS (maintenance work PC) and save.
The data that is saved in the RMCS is replaced by the newly saved data.

1) Select the [FILE[SAVE(→HD)]] sub-menu on the [Remote Operation] menu.
2) Select a driver and a folder to save at the dialog screen.
3) (File saving.)
4) Select the [Disconnect] sub-menu on the [Remote Operation] menu to close the circuit.
   * You can select a new item on the [Remote Operation] menu without closing the circuit.
5) Confirm that OFFLINE is displayed on the Model Main screen.

5.2.3 Editing

To edit/set contents of data on the target FAX device from the RMCS (maintenance work PC) side
You can also save the data you edited/set in the RMCS. In this case, the data saved in the RMCS is replaced with the data you have just saved.

1) Select an item to edit/set at the [EDIT(ONLINE)] Sub-menu on the [Remote Operation] menu.

User data
Serviceman data
TEL number data

2) The dialog screen for User/Serviceman/Telephone number data appears.
3) Edit/set the contents of data.

Updating the data on the target FAX device side:
4) Press the LOAD button.
5) (File loading.)
6) Select the [Disconnect] sub-menu on the [Remote Operation] menu to close the circuit.
   * You can select a new item on the [Remote Operation] menu without closing the circuit.
7) Confirm that OFFLINE is displayed on the Model Main screen.

Updating the data on the RMCS (Maintenance work terminal) side:
4) Press the SAVE button.
5) Select a drive and a folder at the SAVE dialog screen and press the OK button.
6) Select the [Disconnect] sub-menu on the [Remote Operation] menu to close the circuit.
   * You can select a new item on the [Remote Operation] menu, without closing the circuit.
7) Confirm that OFFLINE is displayed on the by the Model Main screen.

5.2.4 Initializing

To initialize the contents of registration of the target FAX device by sending the initialization command to the target FAX device from the RMCS (Maintenance work PC).

(1) Select an item to initialize at the [Initialization of FAX] sub-menu on the [Remote Operation] menu.

All data
User data
Serviceman data
TEL number data
Activity report data
Drum counter
Toner counter
Drum(T) counter
Print counter
Scan counter

Appendix I TROUBLESHOOTING MANUAL

1. General

This manual shall be used to identify the failure cause when a failure of the board is detected as a result of recovery through board replacement, etc. Therefore, the solder failure, pattern failure, part mounting failure are excluded.

2. Tools

The following tools are recommended for board analysis:

(1) Oscillator: At a frequency of 100 MHz or higher
(2) Soldering iron: 15 to 20 W for IC replacement. A soldering iron with a higher capacity should be better for the power supply pattern, etc.
(3) Extension cable: See Extension cable list in Chapter 7.

3. Description

Main control board E76 (C76)

No.	Description	Remarks	See:
01	Memory error	LCD display or test print NG	Figures 3.1-1, 2, 3, 4
02	Reading running system NG	Document feed error, etc.	Figure 3.1-5
03	Read image data NG	All white, all black, image disturbance, etc.	Figures 3.1-6, 7
04	Heater NG	Printer alarm 4, etc.	
05	Recording paper running system NG	Recording paper feed error, etc.	Figures 3.1-8, 9, 10
06	Printed image data NG	Sector missing, positive after-image, etc.	Figures 3.1-11, 12
07	Sending NG (include:K34/J34)	Call origination error, protocol sending/ receiving error, etc.	
08	Receiving NG (include:K34/J34)	Call origination error, protocol sending/ receiving error, etc.	
09	Clock NG	Clock display error, time error, etc.	Figures 3.1-13, 14, 15, 16
10	No sound from the speaker	Buzzer/monitor, etc.	
11	PC I/F not operating correctly	PC print/PC FAX error, etc.	Figures 3.1-17, 18
12	Operation I/F not operating correctly	LCD not displayed, key invalid, etc.	
13	Toner IDU lock out detect NG	Invalid Toner Cart/Image Drum Unit	
14	G4/G3 error	ISDN/G3 board I/F error	
15	LAN error	HSP error	

V.34 modem board E76 (K34) or J34

No.	Description	Remarks	See:
01	K34/J34 board NG	Call origination error, protocol sending/ receiving error, etc.	Figure 3.2-1

High voltage control board H10

No.	Description	Remarks	See:
01	High voltage output NG	Print alarm 4, etc.	
02	Heater NG	Print alarm 4, etc.	
03	Cover open NG	Close the cover, etc.	
04	Photo sensor NG	Paper JAM, etc.	

Operation control board P76/P77, and LCD unit

No.	Description	Remarks	See:
01	LCD display NG	LCD not displayed (LCD failures excluded)	
02	Operation not responded	Key press or LCD invalid	
03	Transfer to hiper power save mode NG	Main power off invalid	
04	Return from hiper power save mode NG	Main power on invalid	

IDU/toner lock out detect board DLK

No.	Description	Remarks	See:
01	Toner lock out detect NG	Invalid Toner cart.	
02	Image Drum unit lock out detect NG	Invalid Image Drum unit	

Option memory expander board RA1

No.	Description	Remarks	See:
01	RA1 error	LCD display or test print NG	Figures 3.6-1, 2

Option G4/ISDN I/F control board G4A

No.	Description	Remarks	See:
01	ISDN Board NG (01)	ISDN Board NG (code:01) at self diagnosis	-
02	ISDN Board NG (02)	ISDN Board NG (code:02) at self diagnosis	Figure 3.7-1
03	ISDN Board NG (03)	ISDN Board NG (code:03) at self diagnosis	Figures 3.7-2, 3, 4
04	ISDN Board NG (04)	ISDN Board NG (code:04) at self diagnosis	Figures 3.7-5, 6, 7
05	ISDN Board NG (05)	ISDN Board NG (code:05) at self diagnosis	-
06	CPU ROM HASH NG	CPU ROM HASH NG at self diagnosis	-
07	CPU RAM NG	CPU RAM NG at self diagnosis	-
08	PROGRAM HASH NG	PROGRAM HASH NG at self diagnosis	Figure 3.7-1
09	RAM NG	RAM NG at self diagnosis	Figure 3.7-8
10	DPRAM NG	DPRAM NG at self diagnosis	Figures 3.7-2, 3, 4
11	G4 mode communication NG	Communication error at G4 mode on ISDN	Figures 3.7-5, 6, 7, 9, 10
12	G3 mode communication NG	Communication error at G3 mode on ISDN	Figures 3.7-11, 12
13	G4 mode PC loading NG	PC loading error (G4 program)	Figures 3.7-1, 2, 3, 4, 8
14	Power ON NG (01)	LCD display "ISDN BOARD I/F ERROR" at power on	Fgirues 3.7-1, 2, 3, 4, 5, 6, 7
15	Power ON NG (02)	G4A board isn't detected	-

Network control board UNC/WN5/TB0

UNC: US/Canada

No.	Description	Remarks	See:
01	Auto answer mode NG	No detect ringing signal at auto answer mode	
02	Dialing NG	Dialing NG at MF or DP mode	
03	Sending NG	No sound at line monitor on, etc.	
04	Receiving NG	No sound at line monitor on, etc.	
05	External telephone no detect	No telephone mode at external telephone	

WN5: International

No.	Description	Remarks	See:
01	Auto answer mode NG	No detect ringing signal at auto answer mode	
02	Dialing NG	Dialing NG at MF or DP mode	
03	Sending NG	No sound at line monitor on, etc.	
04	Receiving NG	No sound at line monitor on, etc.	
05	External telephone no detect	No telephone mode at external telephone	

TB0: EC countries

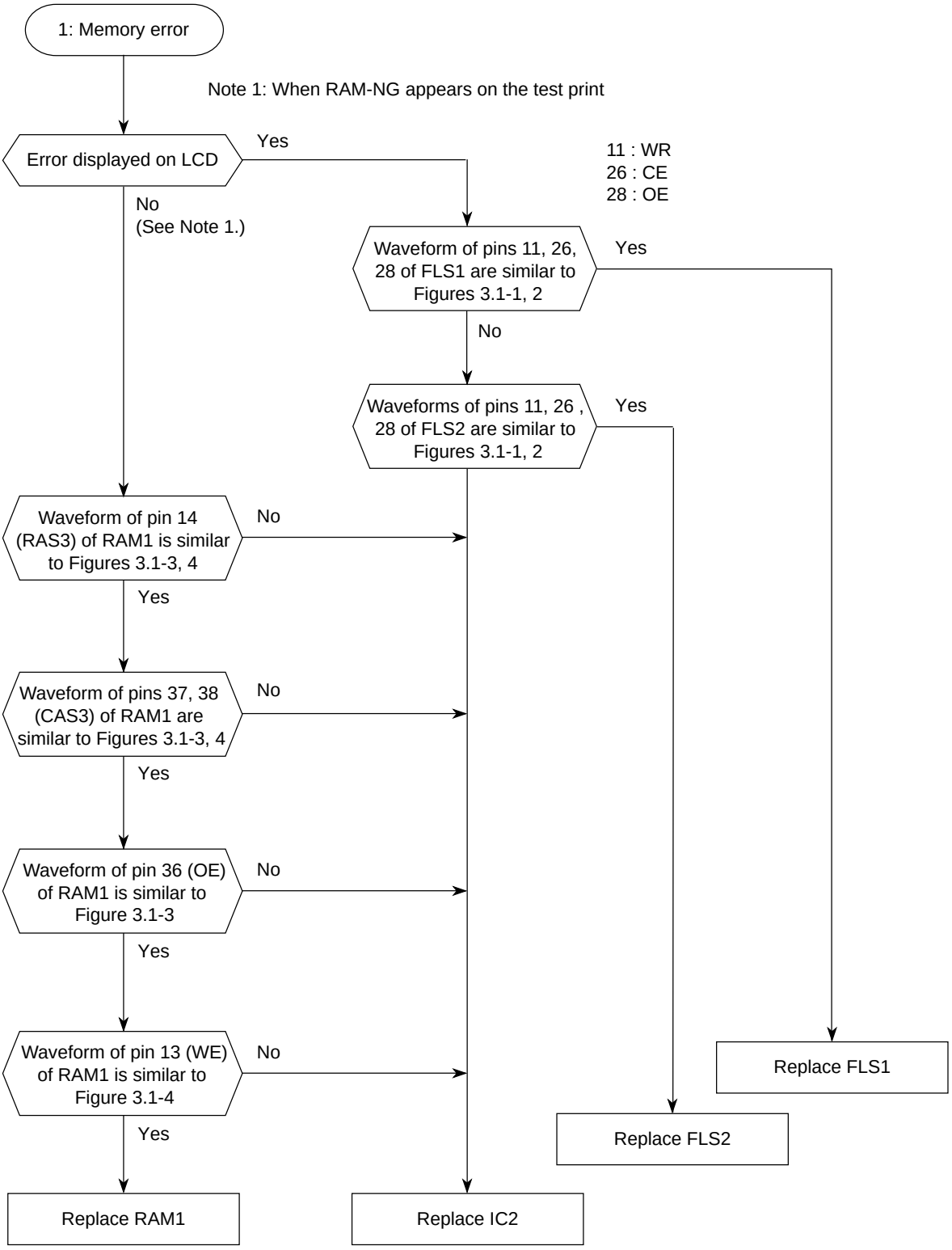
No.	Description	Remarks	See:
01	Auto answer mode NG	No detect ringing signal at auto answer mode	
02	Dialing NG	Dialing NG at MF or DP mode	
03	Sending NG	No sound at line monitor on, etc.	
04	Receiving NG	No sound at line monitor on, etc.	
05	External telephone no detect	No telephone mode at external telephone	

Option G3 control board G3A

No.	Description	Remarks	See:
01	G3 Board NG (01)	BOOT2 signal does not change from 0V to 5V.	—
02	G3 Board NG (02)	Program hash NG (flash memory) at self diagnosis.	Figure 3.9-1
03	G3 Board NG (03)	MUPIS I/F initial sequence error	Figure 3.9-2, 3, 4
04	CPU ROM HASH NG	CPU ROM HASH NG at self diagnosis	—
05	CPU RAM NG	CPU RAM NG at self diagnosis	—
06	PROGRAM HASH NG	PROGRAM HASH NG at self diagnosis	Figure 3.9-1
07	RAM NG	RAM NG at self diagnosis	Figure 3.9-5
08	DPRAM	DPRAM NG at self diagnosis	Figure 3.9-2, 3, 4
09	Sending NG	Call origination error, protocol sending/receiving error, etc.	—
10	Receiving NG	Call origination error, protocol sending/receiving error, etc.	—
11	G3 mode PC loading NG	PC loading error (G3 program)	Figure 3.9-1, 2, 3, 4, 5
12	Power ON NG (01)	LCD display "G3 BOARD ERROR" at power on.	Figure 3.9-1, 2, 3, 4
13	Power ON NO (02)	G3A board isn't detected.	—
14	Modem NG	Call origination error, protocol sending/receiving error, etc.	Figure 3.9-6

3.1 Main control board E76 (C76)

3.1.1 Memory error


1: Memory error
Note 1: When RAM-NG appears on the test print
Error displayed on LCD
Yes
No
(See Note 1.)
11 : WR
26 : CE
28 : OE
Waveform of pins 11, 26, 28 of FLS1 are similar to Figures 3.1-1, 2
Yes
No
Waveforms of pins 11, 26 , 28 of FLS2 are similar to Figures 3.1-1, 2
Yes
Waveform of pin 14 (RAS3) of RAM1 is similar to Figures 3.1-3, 4
No
Yes
Waveform of pins 37, 38 (CAS3) of RAM1 are similar to Figures 3.1-3, 4
No
Yes
Waveform of pin 36 (OE) of RAM1 is similar to Figure 3.1-3
No
Yes
Waveform of pin 13 (WE) of RAM1 is similar to Figure 3.1-4
No
Yes
Replace FLS1
Replace FLS2
Replace RAM1
Replace IC2

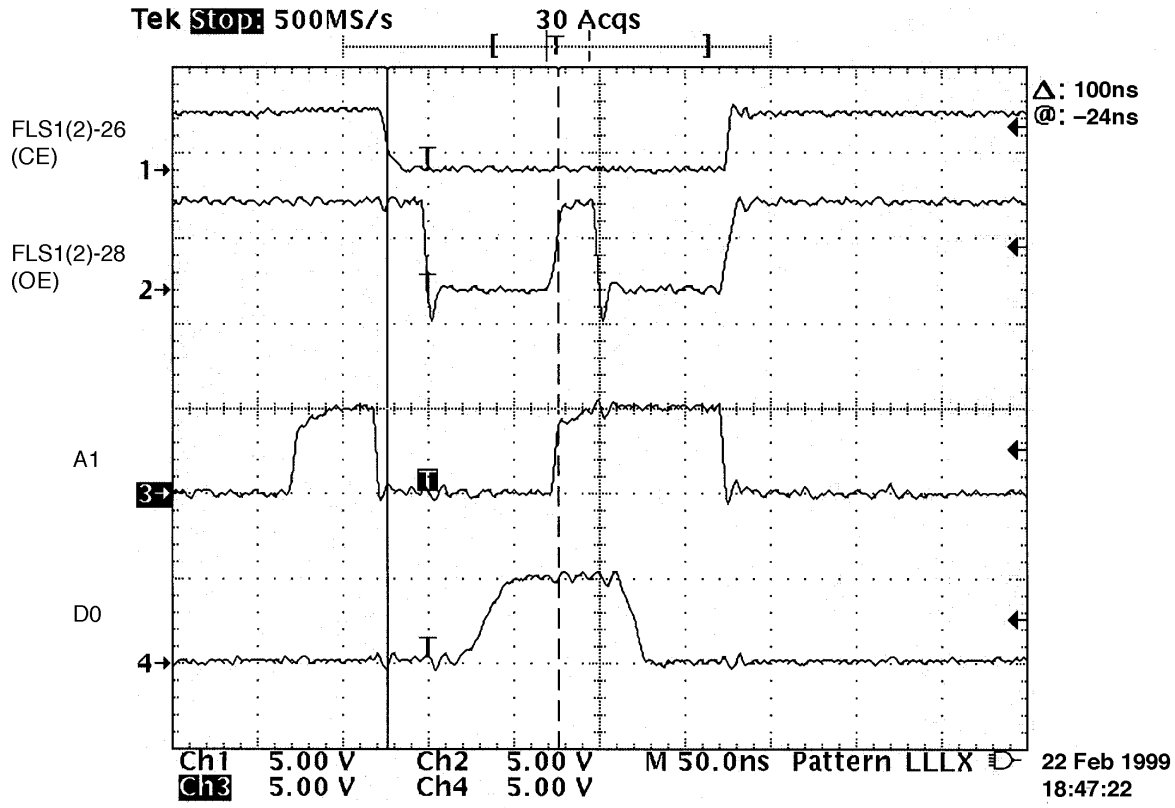


Fig. 3.1-1 FLASH Memory Read

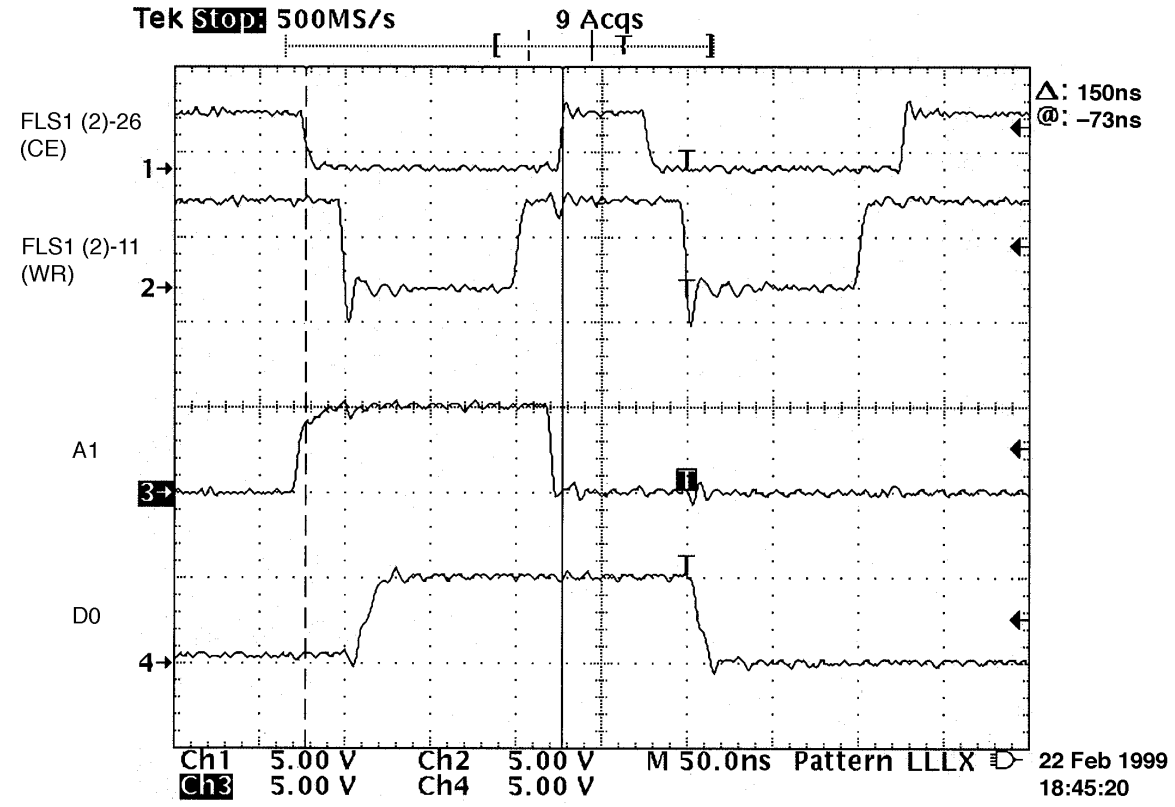


Fig. 3.1-2 FLASH Memory Write

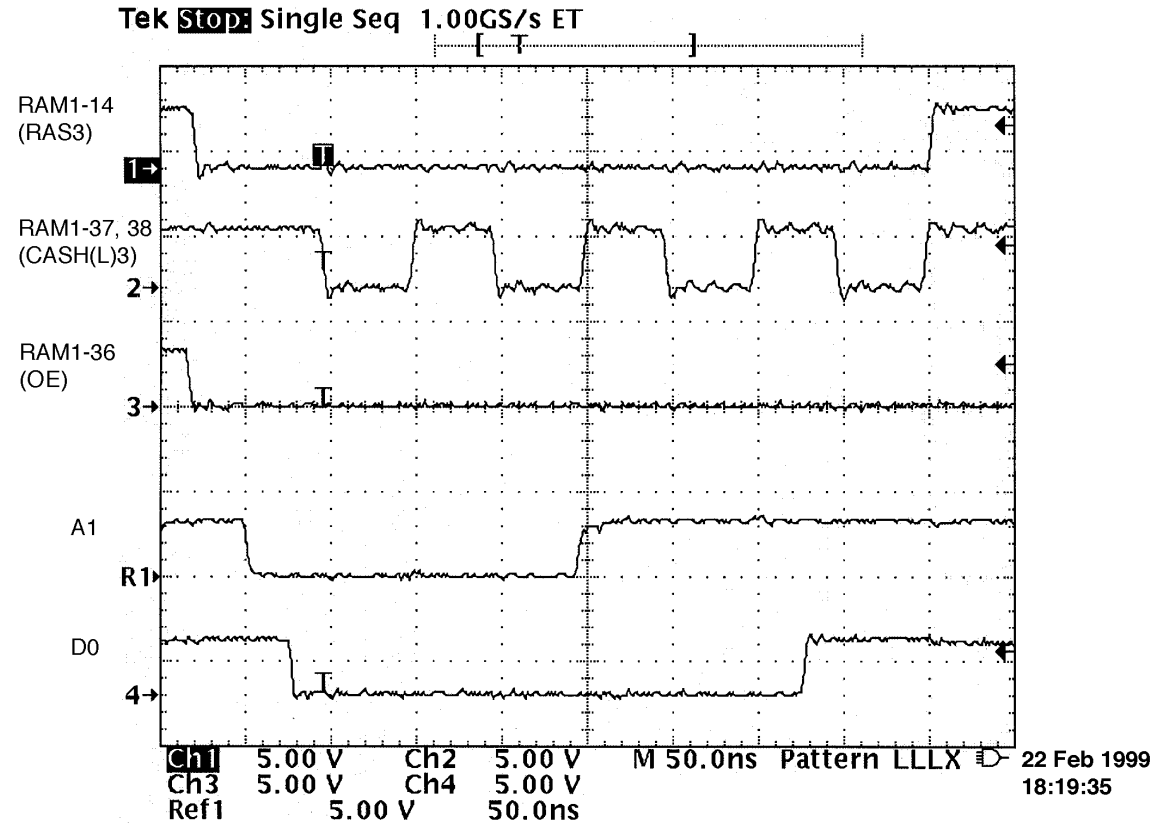


Fig. 3.1-3 DRAM Read

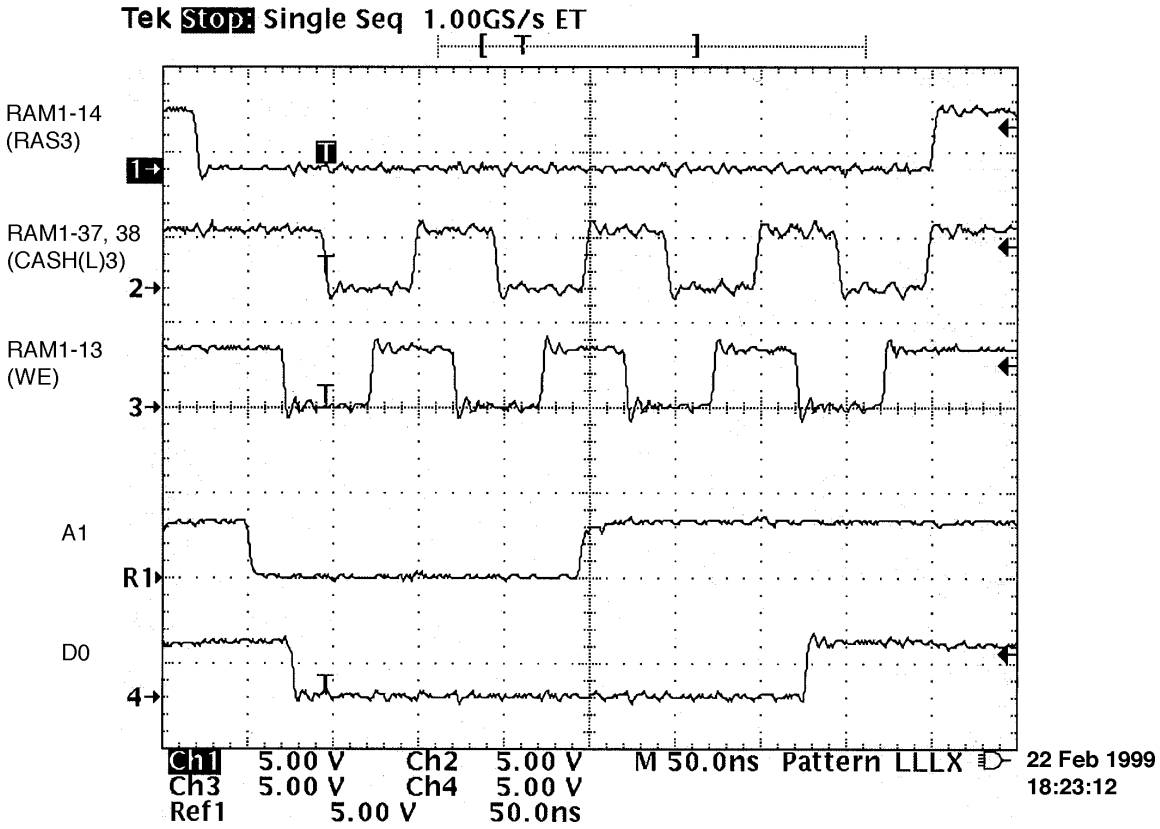
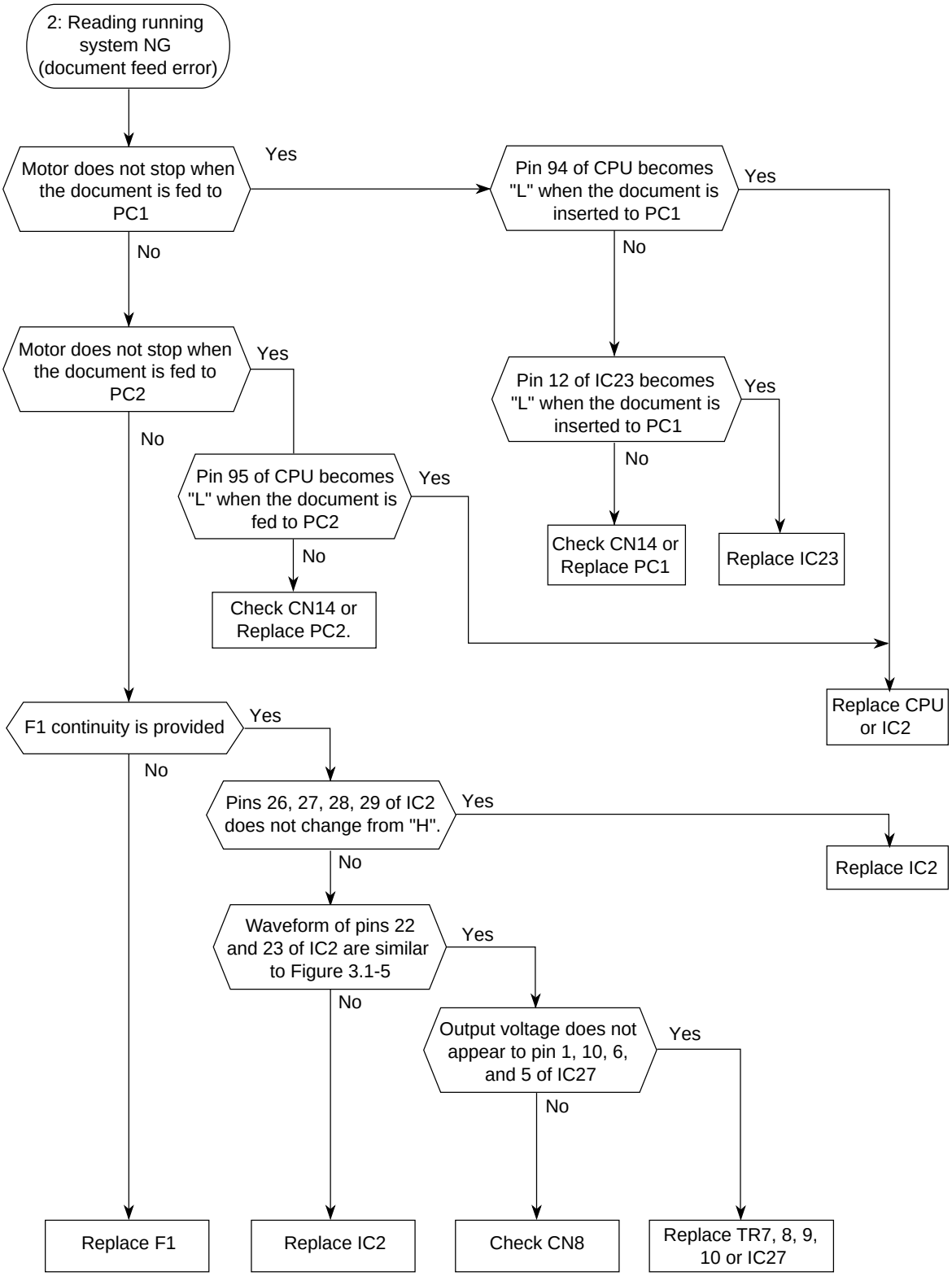


Fig. 3.1-4 DRAM Write

3.1.2 Reading running system NG


2: Reading running system NG (document feed error)
Motor does not stop when the document is fed to PC1
Yes
No
Pin 94 of CPU becomes "L" when the document is inserted to PC1
Yes
No
Motor does not stop when the document is fed to PC2
Yes
No
Pin 12 of IC23 becomes "L" when the document is inserted to PC1
Yes
No
Pin 95 of CPU becomes "L" when the document is fed to PC2
Yes
No
Check CN14 or Replace PC1
Replace IC23
Check CN14 or Replace PC2.
Replace CPU or IC2
F1 continuity is provided
Yes
No
Pins 26, 27, 28, 29 of IC2 does not change from "H".
Yes
No
Replace IC2
Waveform of pins 22 and 23 of IC2 are similar to Figure 3.1-5
Yes
No
Output voltage does not appear to pin 1, 10, 6, and 5 of IC27
Yes
No
Replace F1
Replace IC2
Check CN8
Replace TR7, 8, 9, 10 or IC27

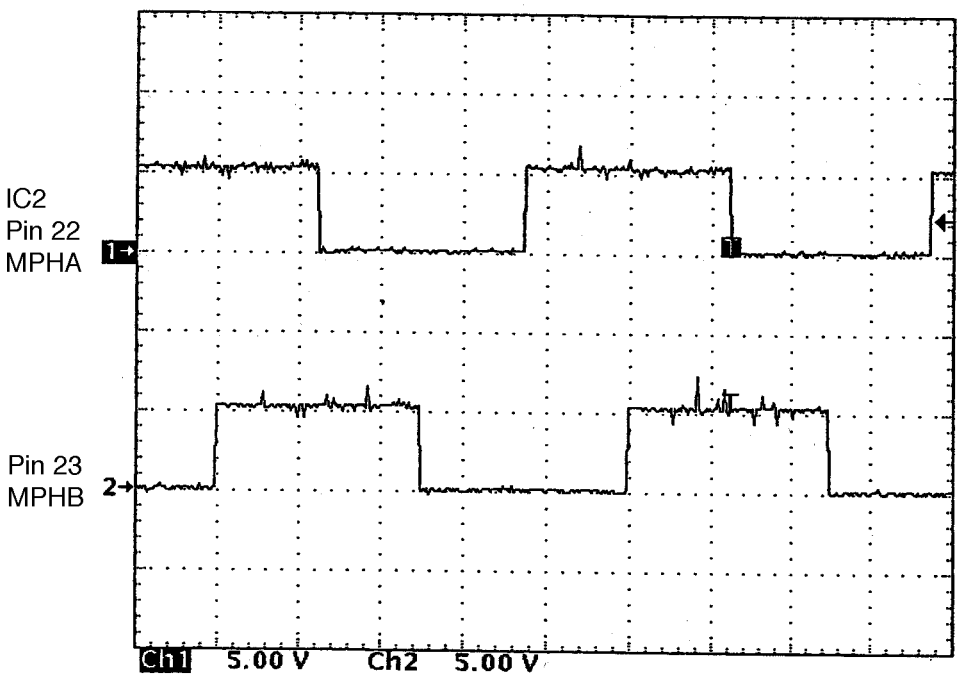
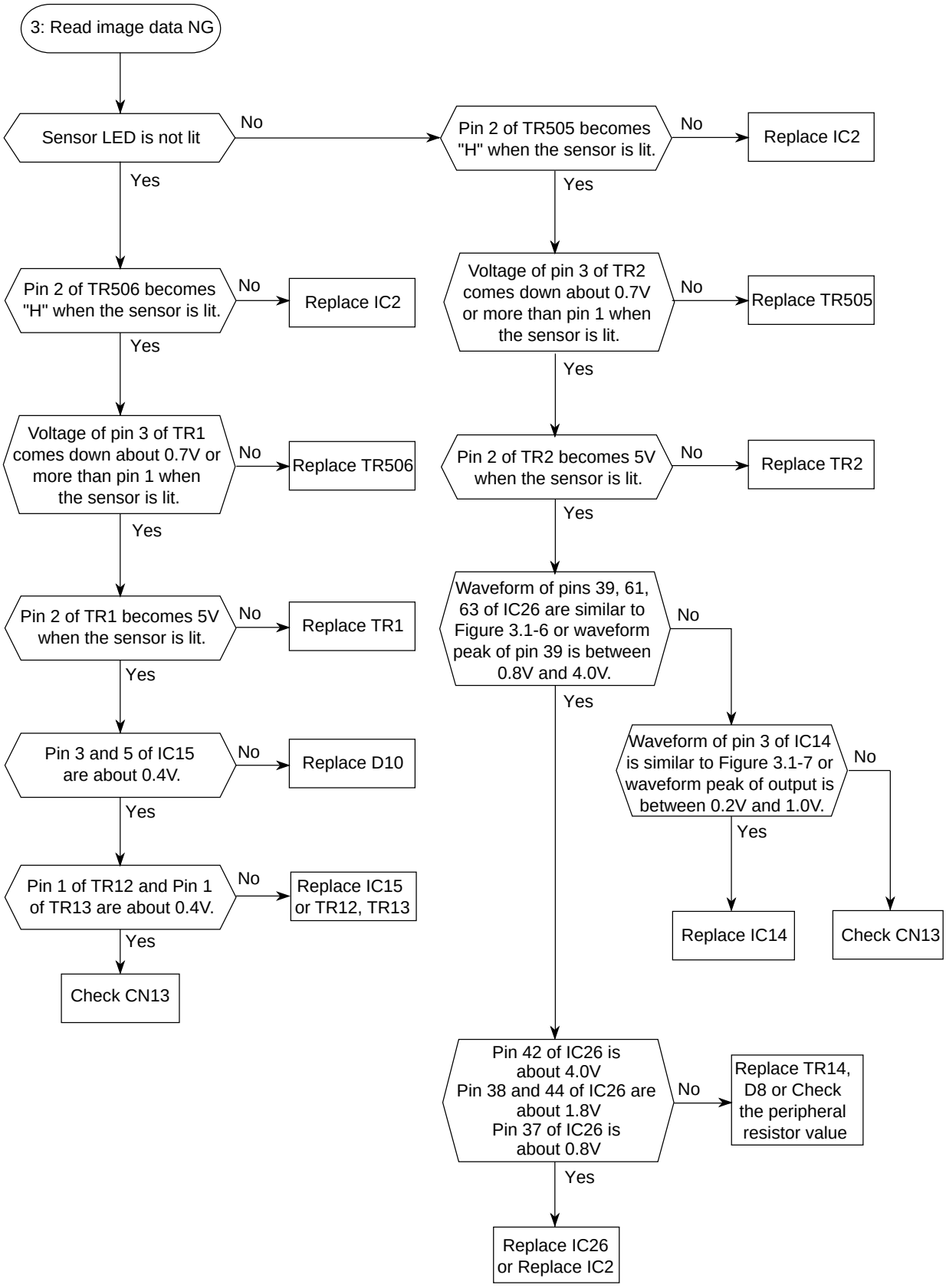


Fig. 3.1-5

3.1.3 Read image data NG


3: Read image data NG
Sensor LED is not lit
No
Yes
Pin 2 of TR506 becomes "H" when the sensor is lit.
No
Replace IC2
Yes
Voltage of pin 3 of TR1 comes down about 0.7V or more than pin 1 when the sensor is lit.
No
Replace TR506
Yes
Pin 2 of TR1 becomes 5V when the sensor is lit.
No
Replace TR1
Yes
Pin 3 and 5 of IC15 are about 0.4V.
No
Replace D10
Yes
Pin 1 of TR12 and Pin 1 of TR13 are about 0.4V.
No
Replace IC15 or TR12, TR13
Yes
Check CN13
Pin 2 of TR505 becomes "H" when the sensor is lit.
No
Replace IC2
Yes
Voltage of pin 3 of TR2 comes down about 0.7V or more than pin 1 when the sensor is lit.
No
Replace TR505
Yes
Pin 2 of TR2 becomes 5V when the sensor is lit.
No
Replace TR2
Yes
Waveform of pins 39, 61, 63 of IC26 are similar to Figure 3.1-6 or waveform peak of pin 39 is between 0.8V and 4.0V.
No
Yes
Waveform of pin 3 of IC14 is similar to Figure 3.1-7 or waveform peak of output is between 0.2V and 1.0V.
No
Yes
Replace IC14
Check CN13
Pin 42 of IC26 is about 4.0V
Pin 38 and 44 of IC26 are about 1.8V
Pin 37 of IC26 is about 0.8V
No
Replace TR14, D8 or Check the peripheral resistor value
Yes
Replace IC26 or Replace IC2

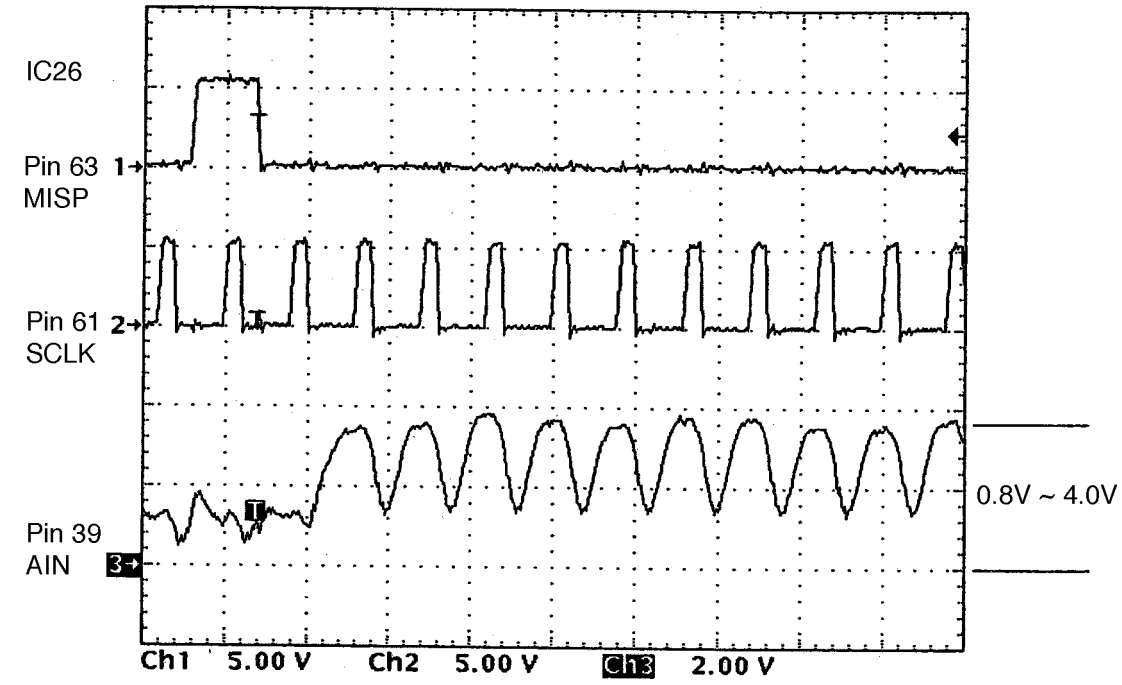


Fig. 3.1-6

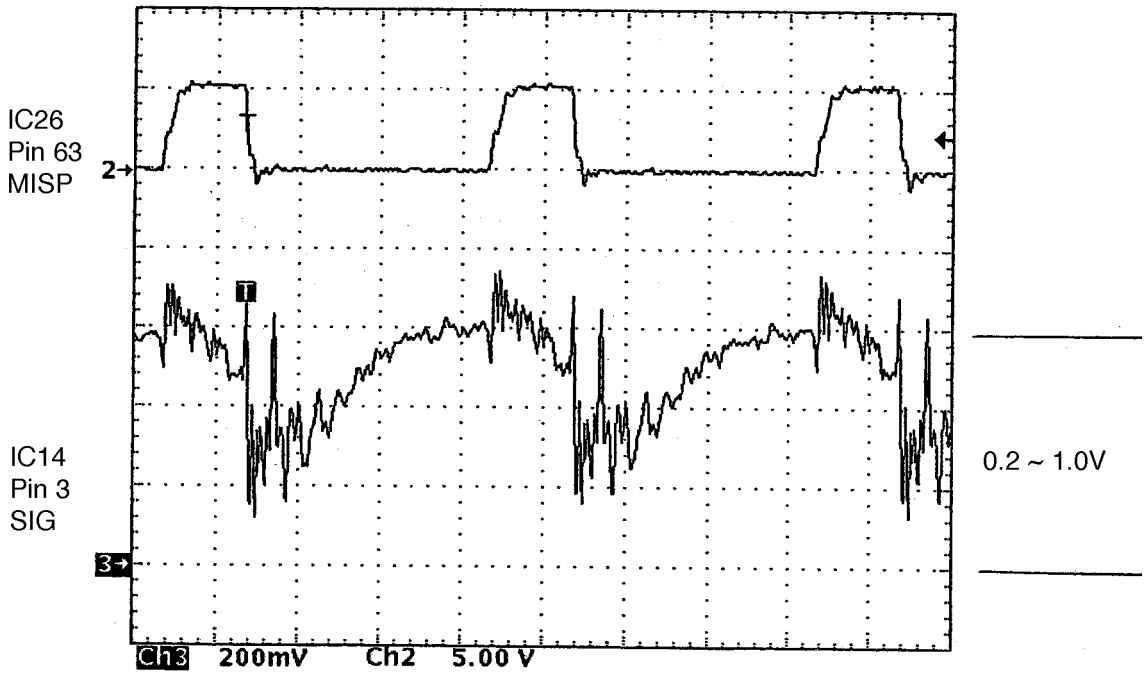
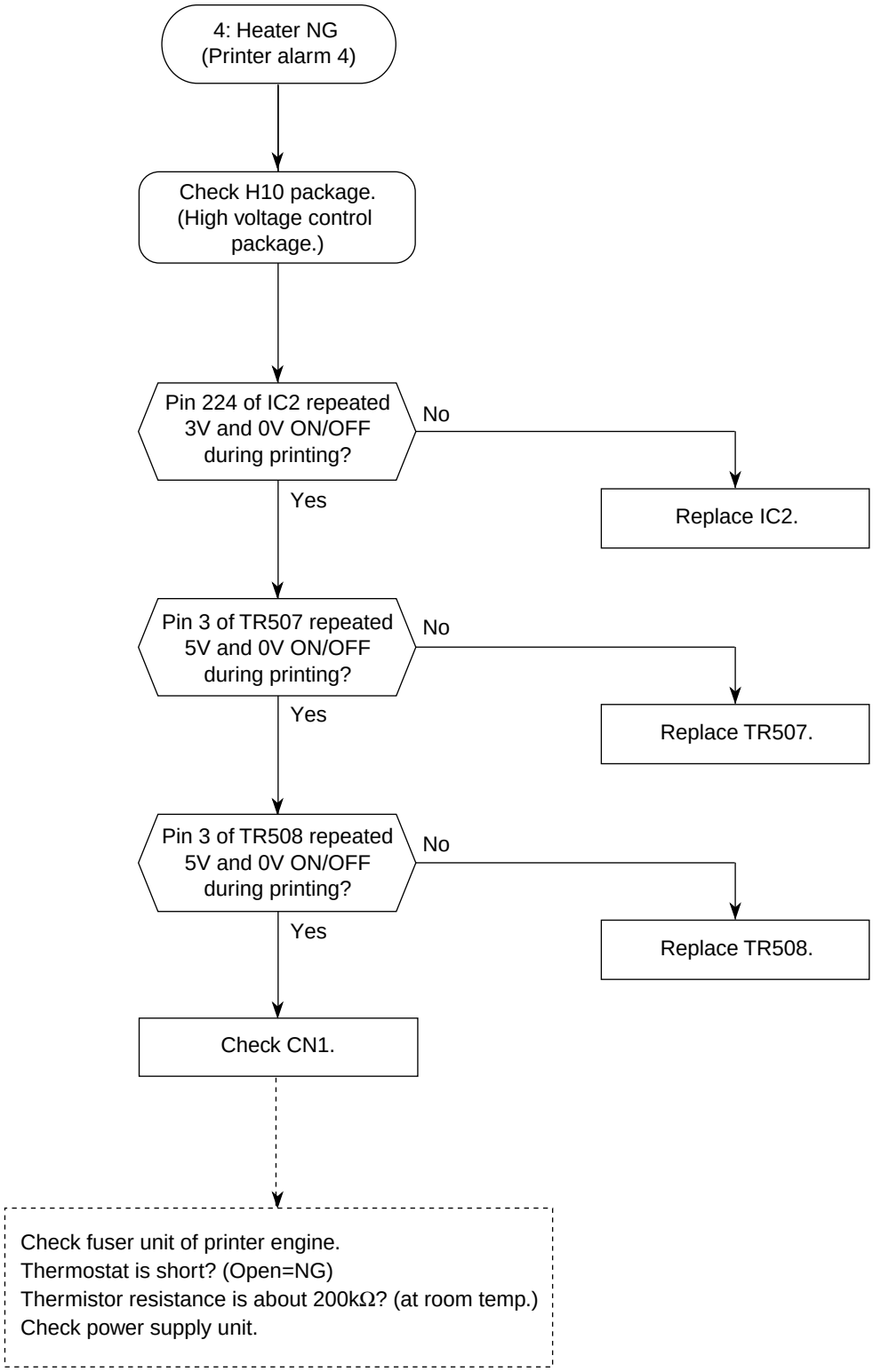
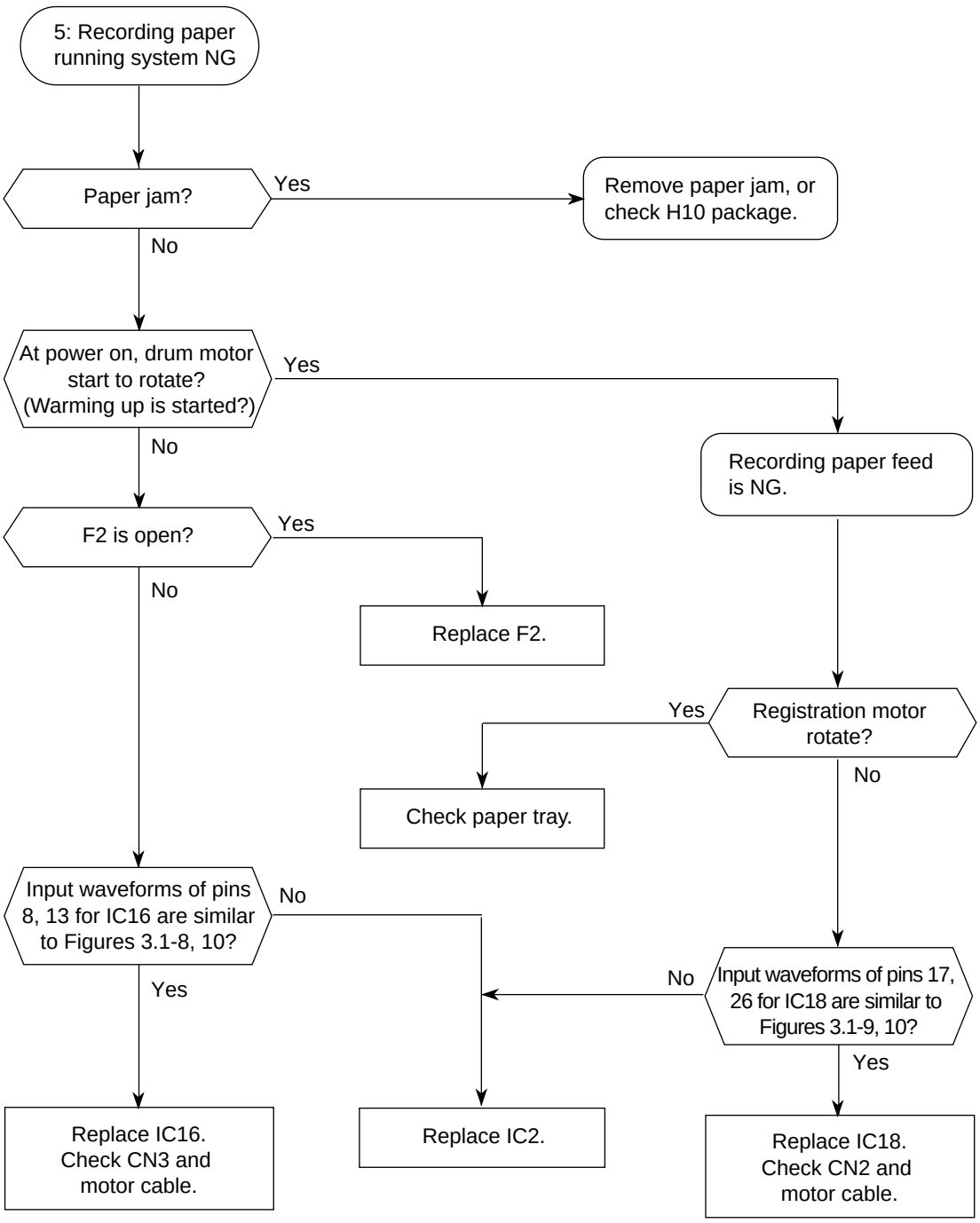


Fig. 3.1-7

3.1.4 Heater NG



3.1.5 Recording paper running system NG



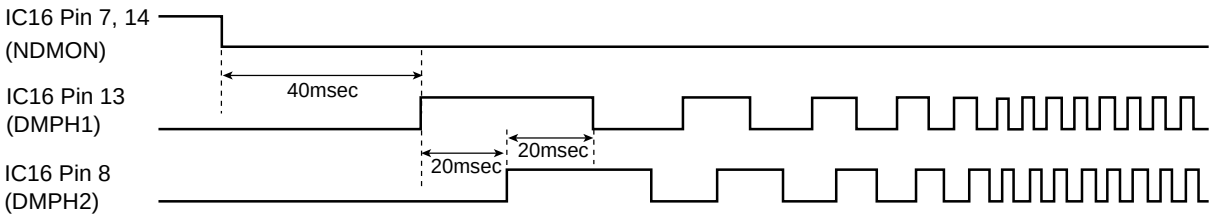
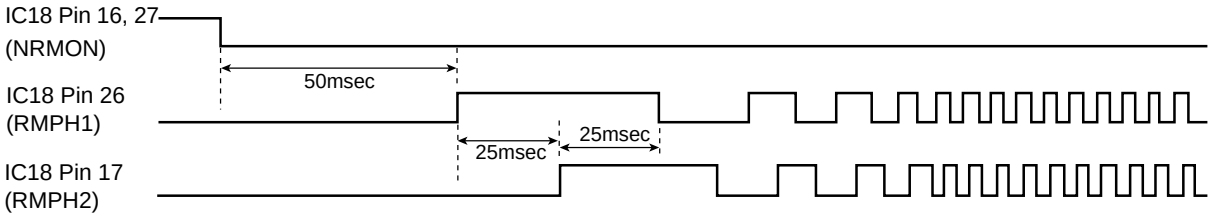
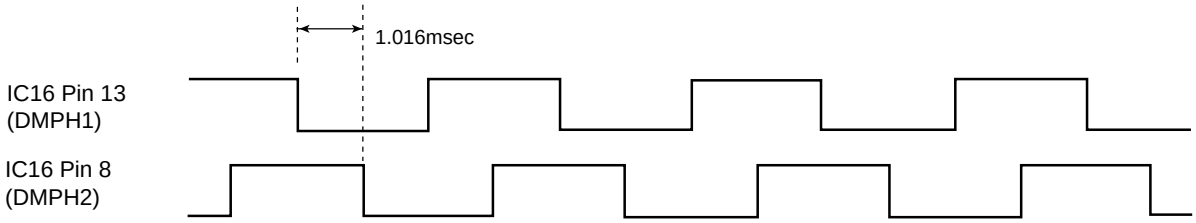


Fig. 3.1-8



* All signals repeated 5V and 0V ON/OFF.

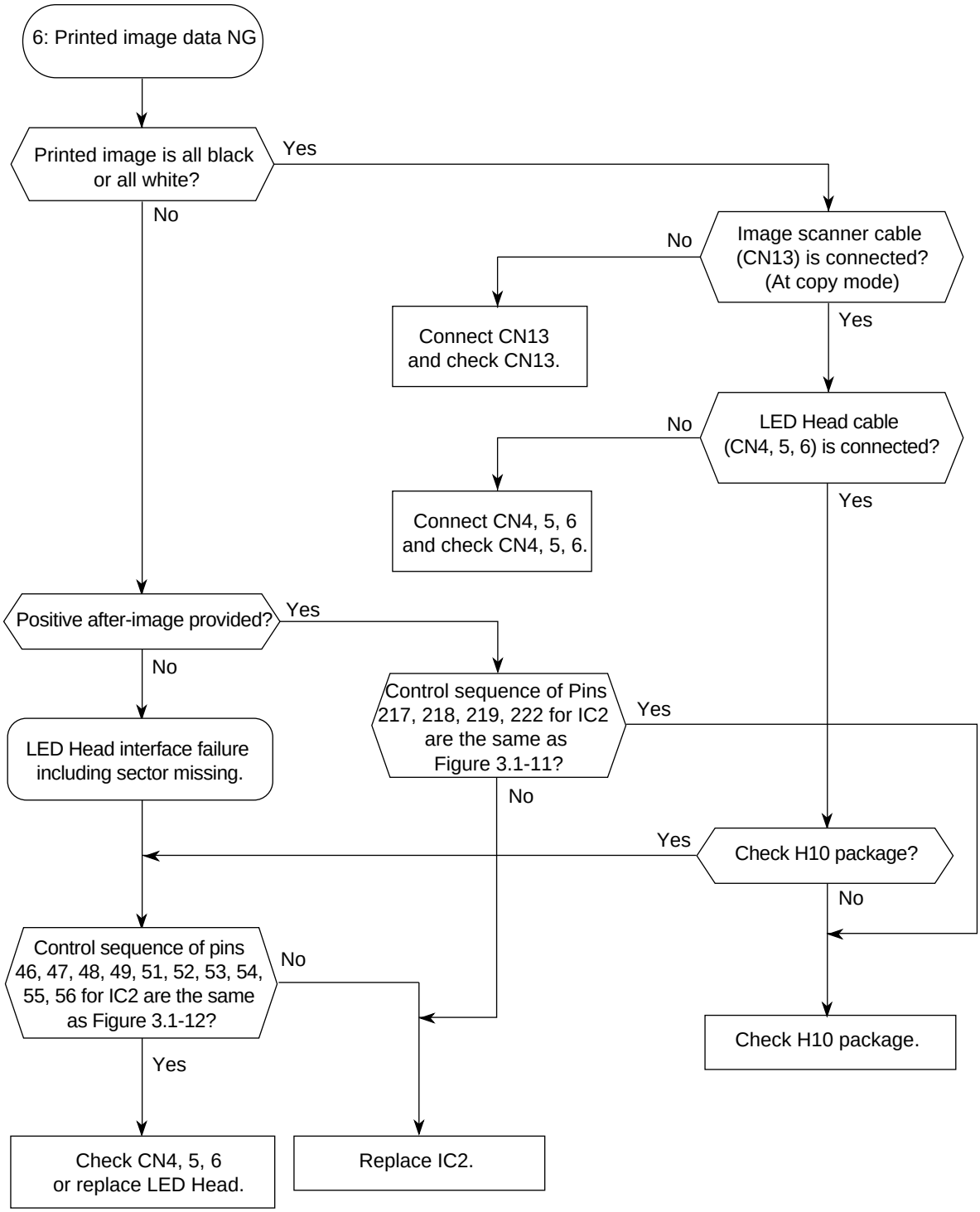
Fig. 3.1-9

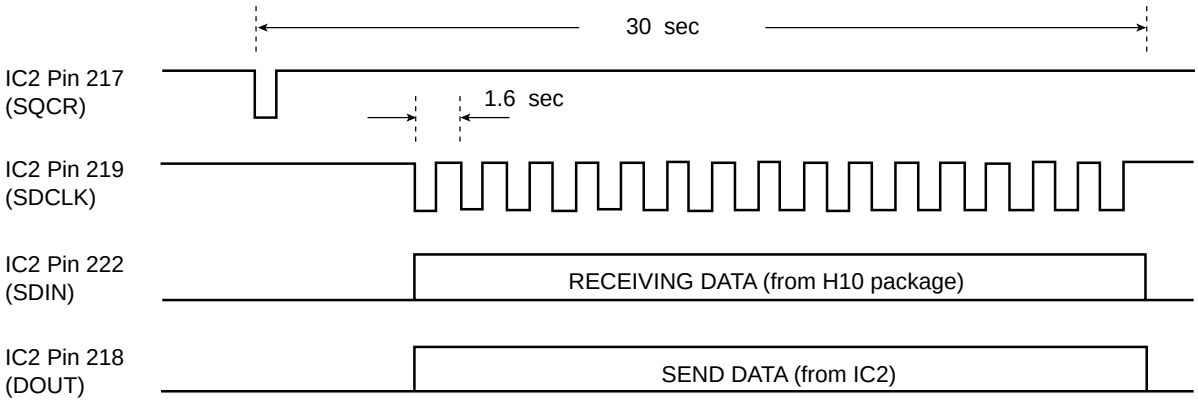


* RMPH1 and RMPH2 are the same waveform as those of DMPH1 and DMPH2.

Fig. 3.1-10

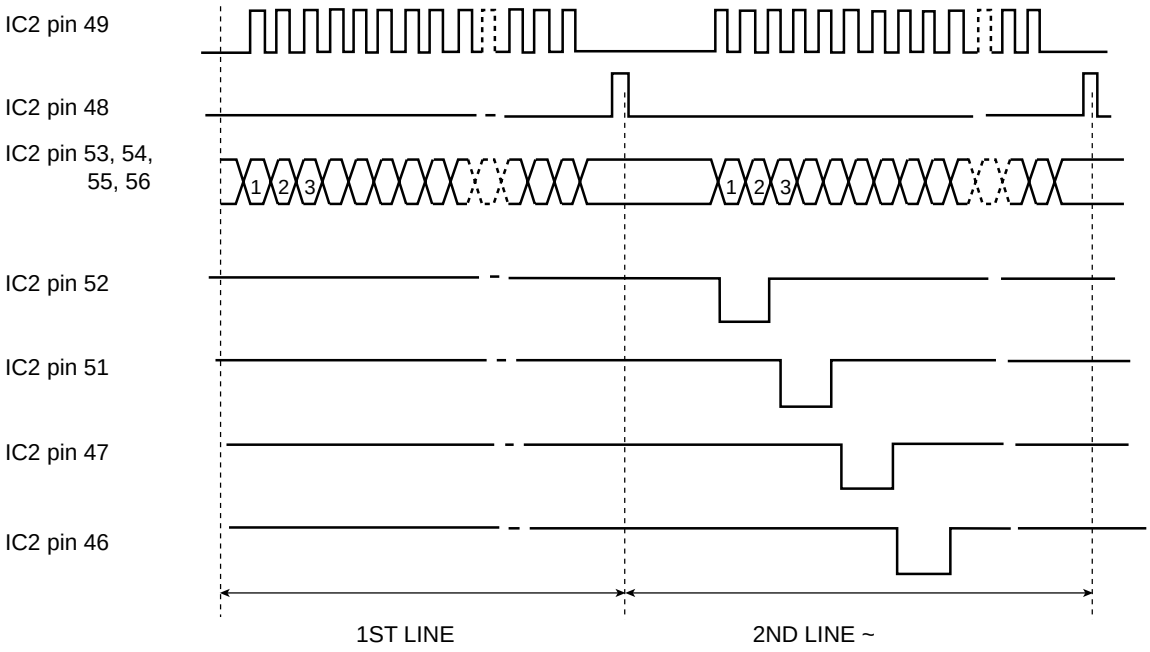
3.1.6 Printing image data NG


6: Printed image data NG
Printed image is all black or all white?
Yes
No
Image scanner cable (CN13) is connected? (At copy mode)
No
Connect CN13 and check CN13.
Yes
LED Head cable (CN4, 5, 6) is connected?
No
Connect CN4, 5, 6 and check CN4, 5, 6.
Yes
Positive after-image provided?
Yes
No
Control sequence of Pins 217, 218, 219, 222 for IC2 are the same as Figure 3.1-11?
Yes
LED Head interface failure including sector missing.
No
Yes
Check H10 package?
No
Control sequence of pins 46, 47, 48, 49, 51, 52, 53, 54, 55, 56 for IC2 are the same as Figure 3.1-12?
No
Check H10 package.
Yes
Check CN4, 5, 6 or replace LED Head.
Replace IC2.



(1) SDCLK: 625 kHz (cycle = 1.6 sec)
(2) Pin 217, 218, 219, 222 repeated 3V and 0V ON/OFF.

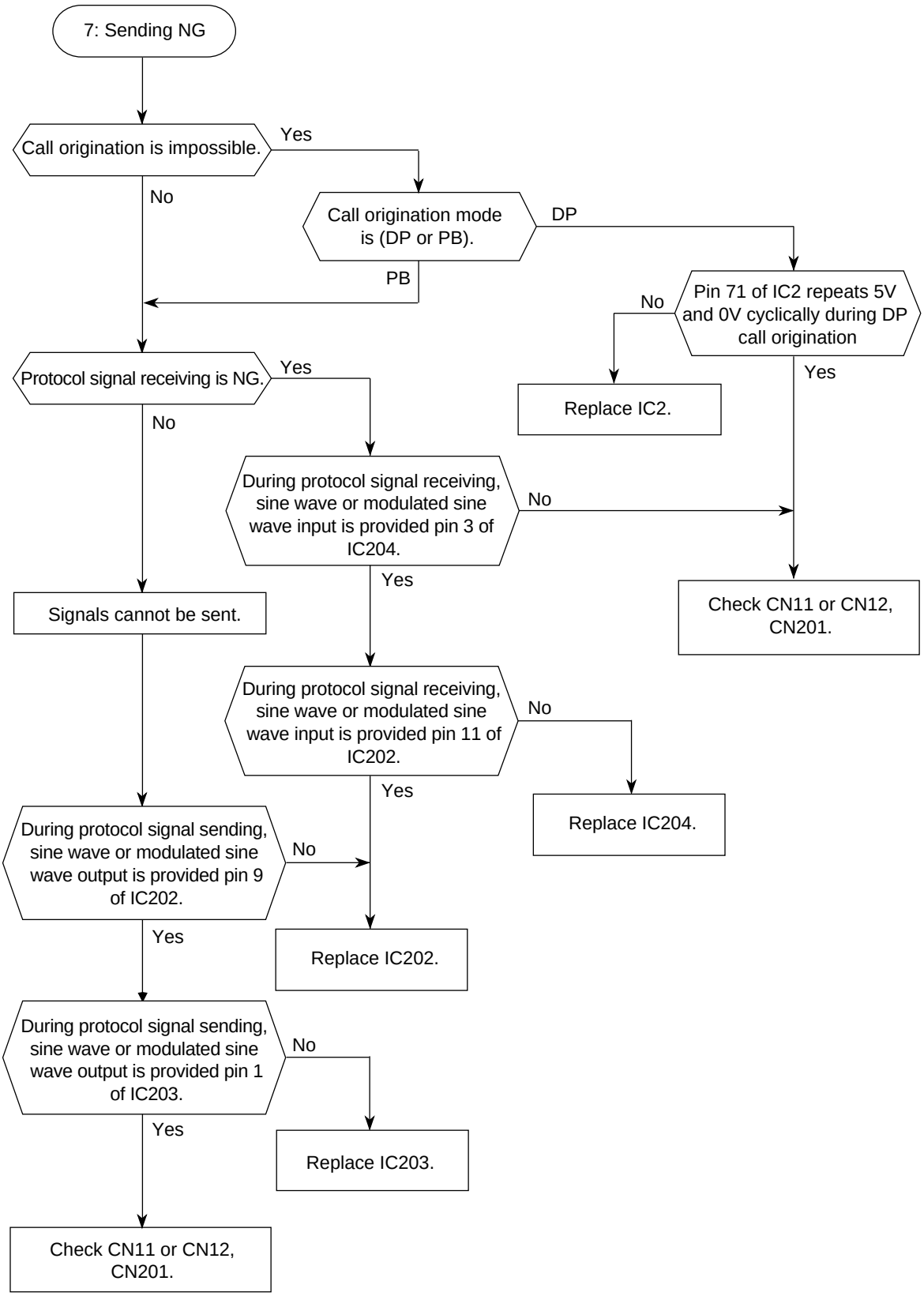
Fig. 3.1-11



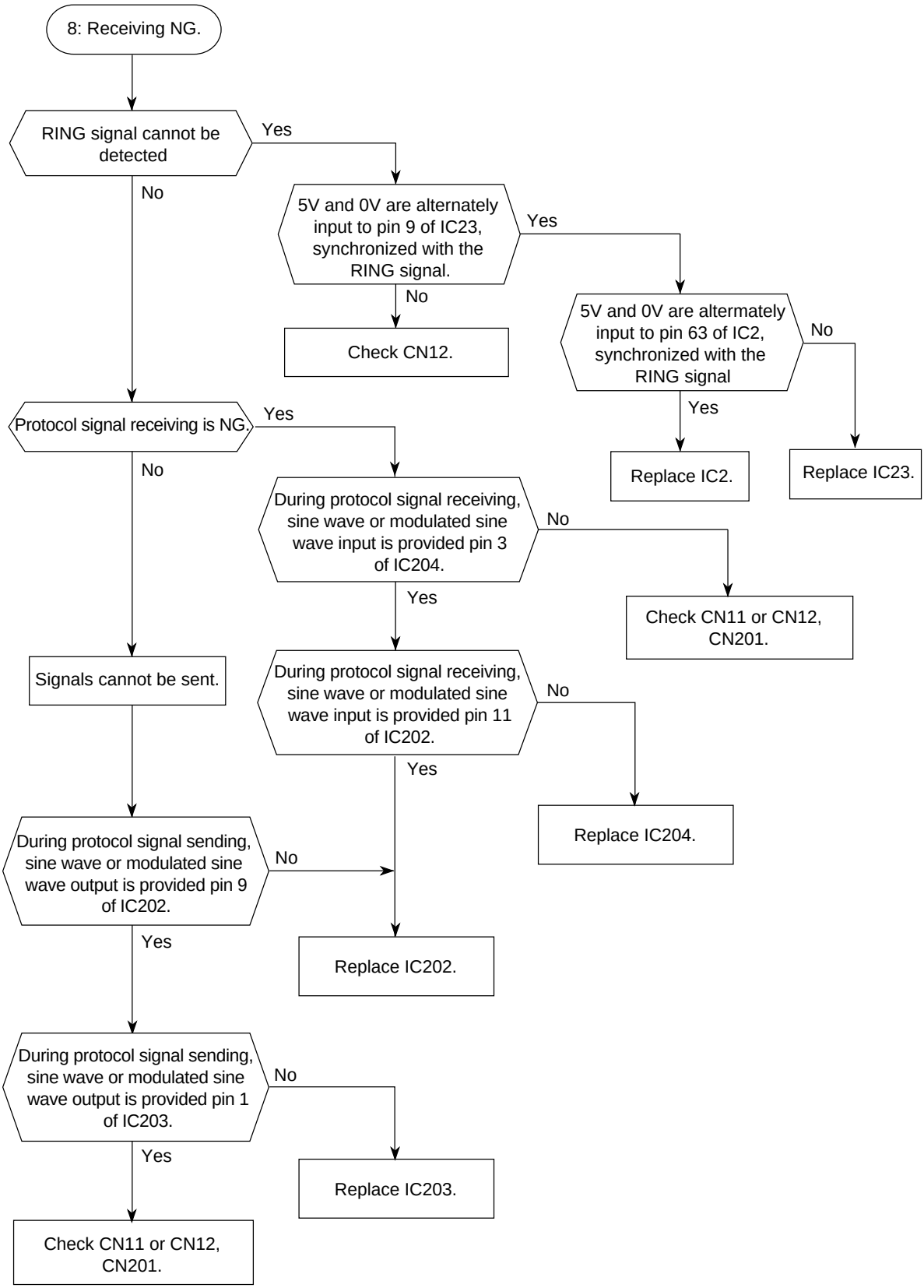
* IC2: Pin 49 (HCLK) = 2.5 or 3.3 or 4.0 or 5.0 MHz

Fig. 3.1-12

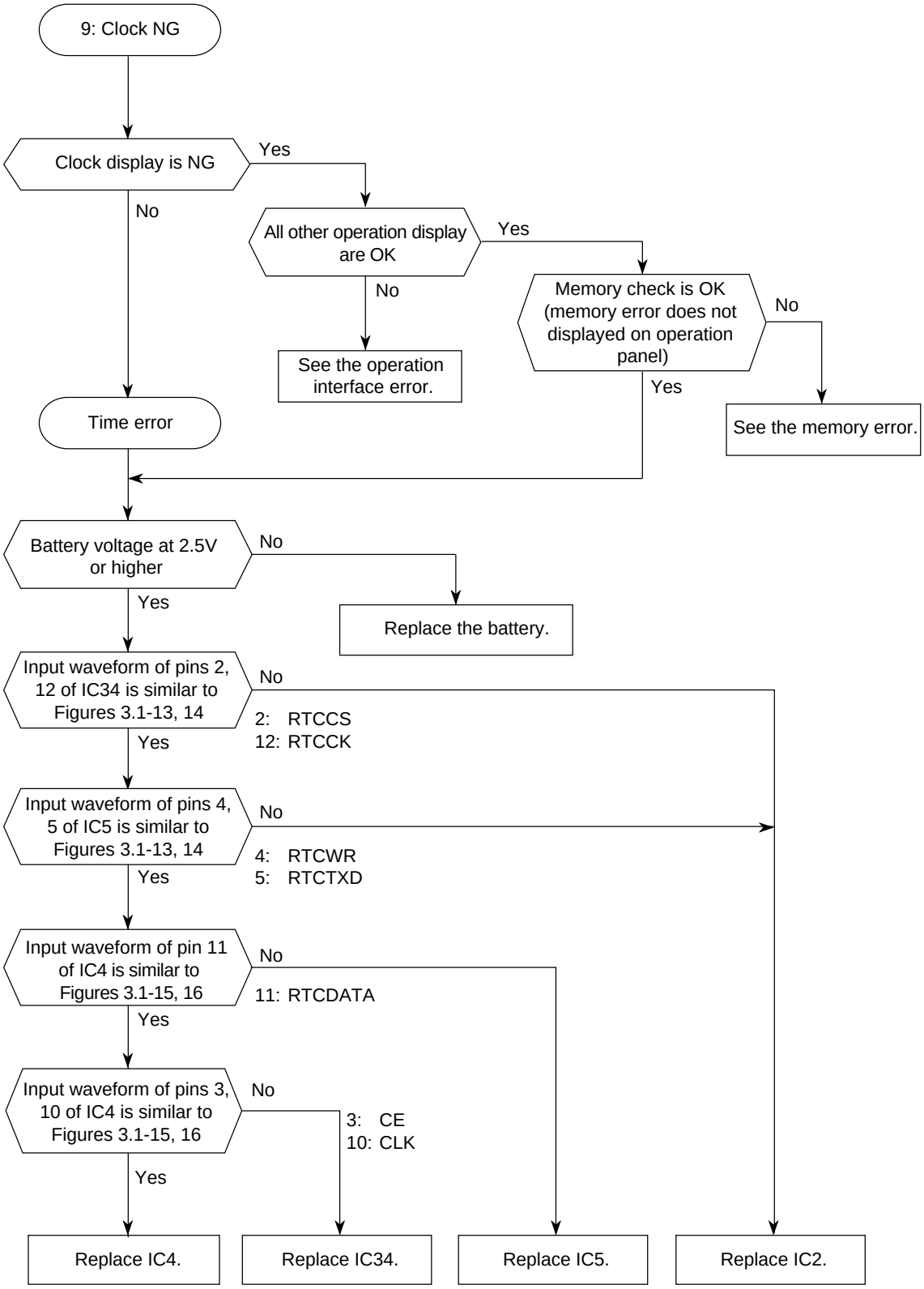
3.1.7 Sending NG (include K34/J34)


7: Sending NG
Call origination is impossible.
Yes
No
Call origination mode is (DP or PB).
DP
PB
Pin 71 of IC2 repeats 5V and 0V cyclically during DP call origination
No
Yes
Replace IC2.
Protocol signal receiving is NG.
Yes
No
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 3 of IC204.
No
Yes
Signals cannot be sent.
Check CN11 or CN12, CN201.
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 11 of IC202.
No
Yes
Replace IC204.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 9 of IC202.
No
Yes
Replace IC202.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 1 of IC203.
No
Yes
Replace IC203.
Check CN11 or CN12, CN201.

3.1.8 Receiving NG (include K34/J34)


8: Receiving NG.
RING signal cannot be detected
Yes
No
5V and 0V are alternately input to pin 9 of IC23, synchronized with the RING signal.
Yes
No
Check CN12.
5V and 0V are altermately input to pin 63 of IC2, synchronized with the RING signal
No
Yes
Replace IC2.
Replace IC23.
Protocol signal receiving is NG.
Yes
No
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 3 of IC204.
No
Yes
Check CN11 or CN12, CN201.
Signals cannot be sent.
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 11 of IC202.
No
Yes
Replace IC204.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 9 of IC202.
No
Yes
Replace IC202.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 1 of IC203.
No
Yes
Replace IC203.
Check CN11 or CN12, CN201.

3.1.9 Clock NG


9: Clock NG
Clock display is NG
Yes
No
All other operation display are OK
Yes
No
See the operation interface error.
Memory check is OK (memory error does not displayed on operation panel)
No
Yes
See the memory error.
Time error
Battery voltage at 2.5V or higher
No
Yes
Replace the battery.
Input waveform of pins 2, 12 of IC34 is similar to Figures 3.1-13, 14
No
2: RTCCS
12: RTCCK
Yes
Input waveform of pins 4, 5 of IC5 is similar to Figures 3.1-13, 14
No
4: RTCWR
5: RTCTXD
Yes
Input waveform of pin 11 of IC4 is similar to Figures 3.1-15, 16
No
11: RTCDATA
Yes
Input waveform of pins 3, 10 of IC4 is similar to Figures 3.1-15, 16
No
3: CE
10: CLK
Yes
Replace IC4.
Replace IC34.
Replace IC5.
Replace IC2.

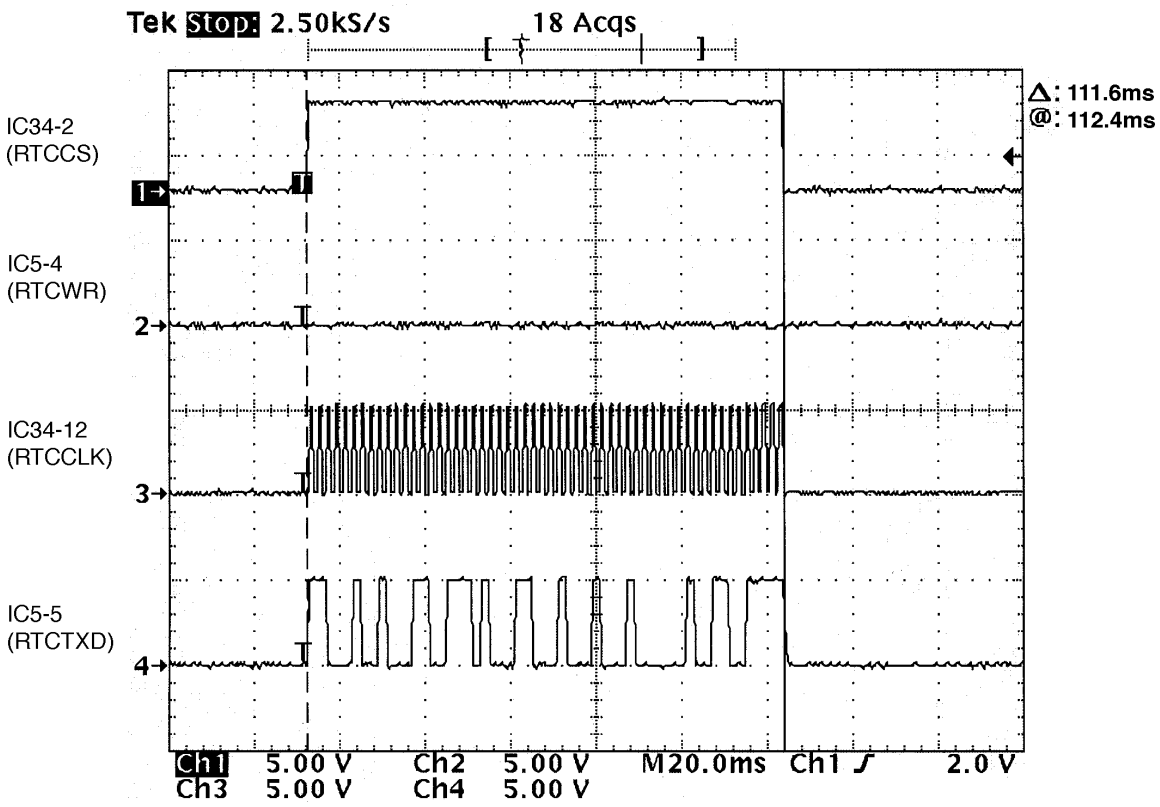


Fig. 3.1-13 RTC Time Read

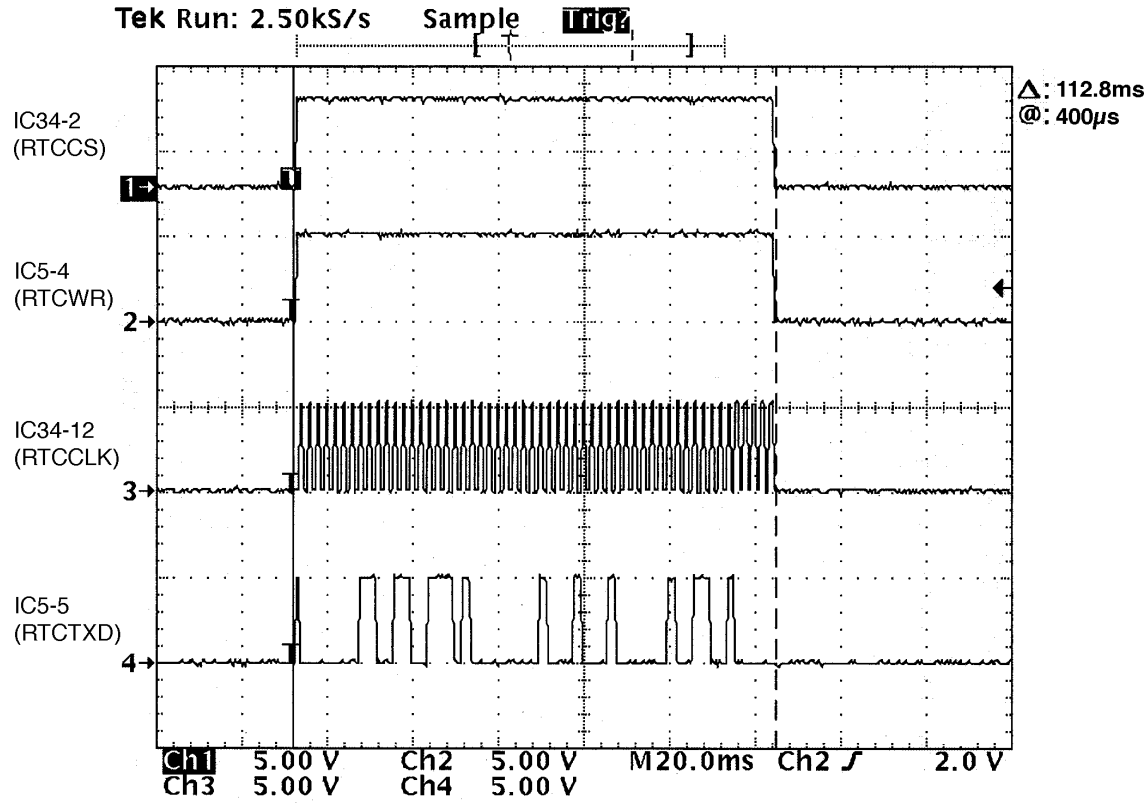


Fig. 3.1-14 RTC Time Set

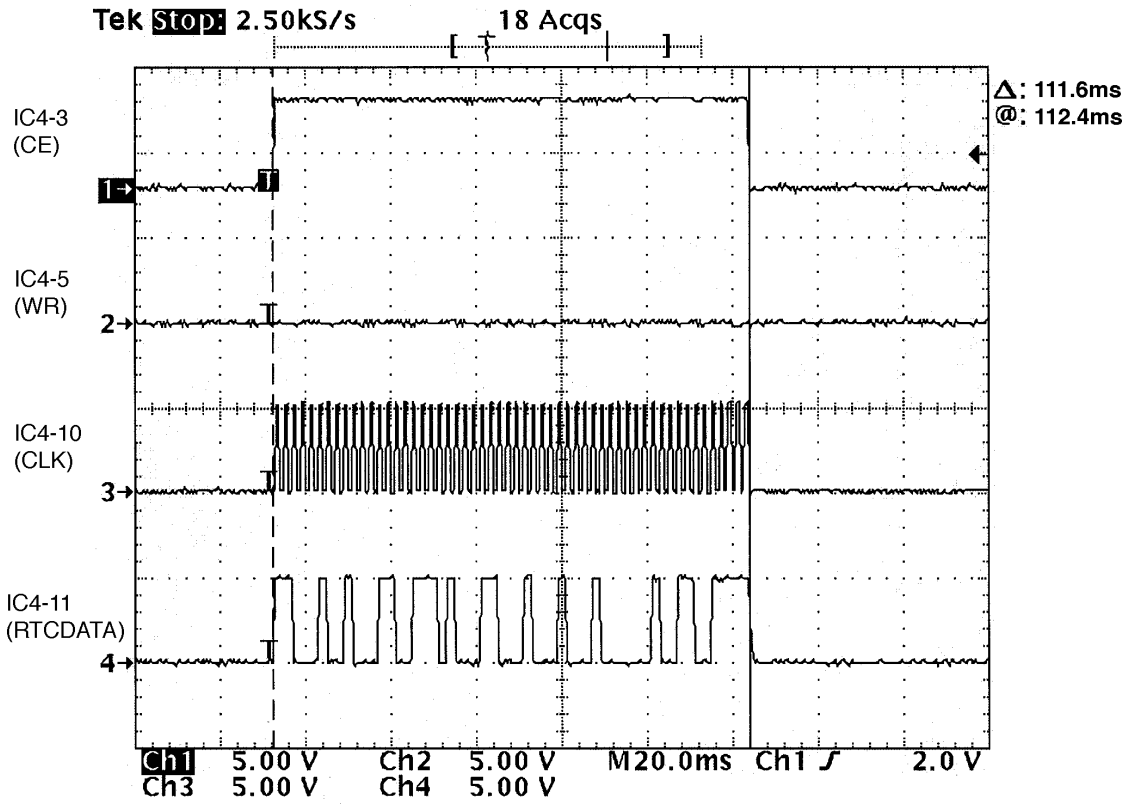


Fig. 3.1-15 RTC Time Read

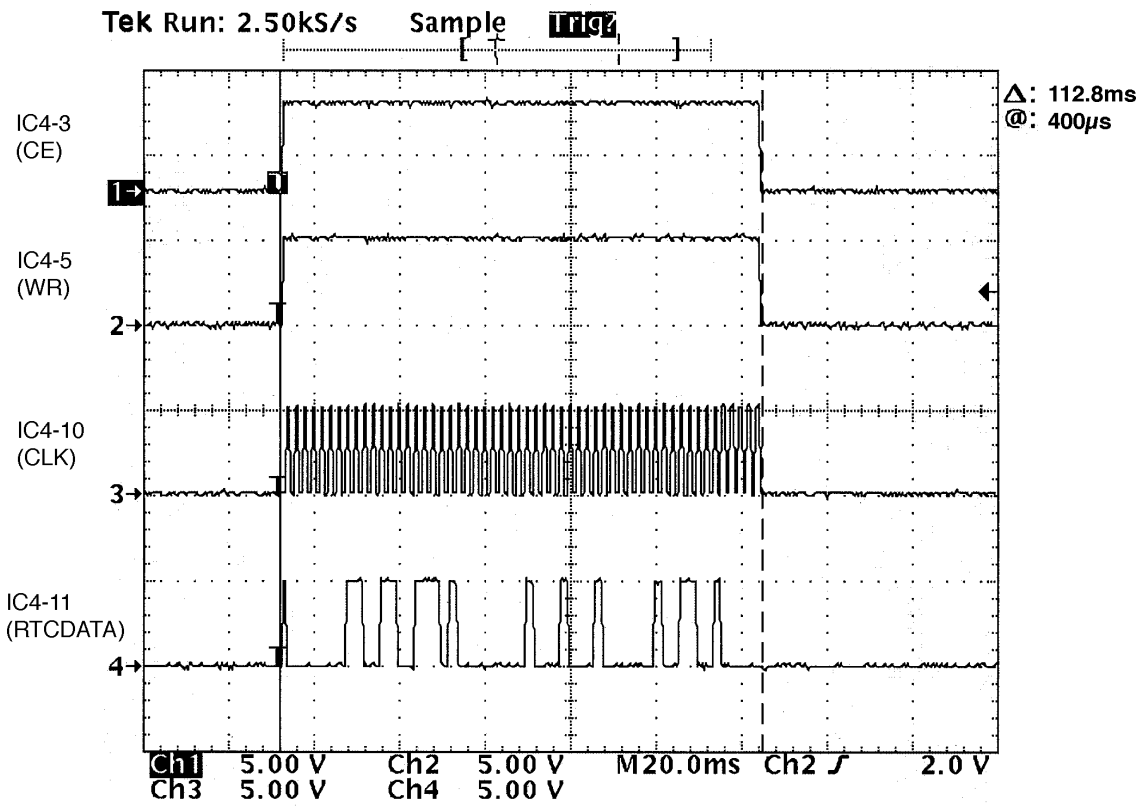
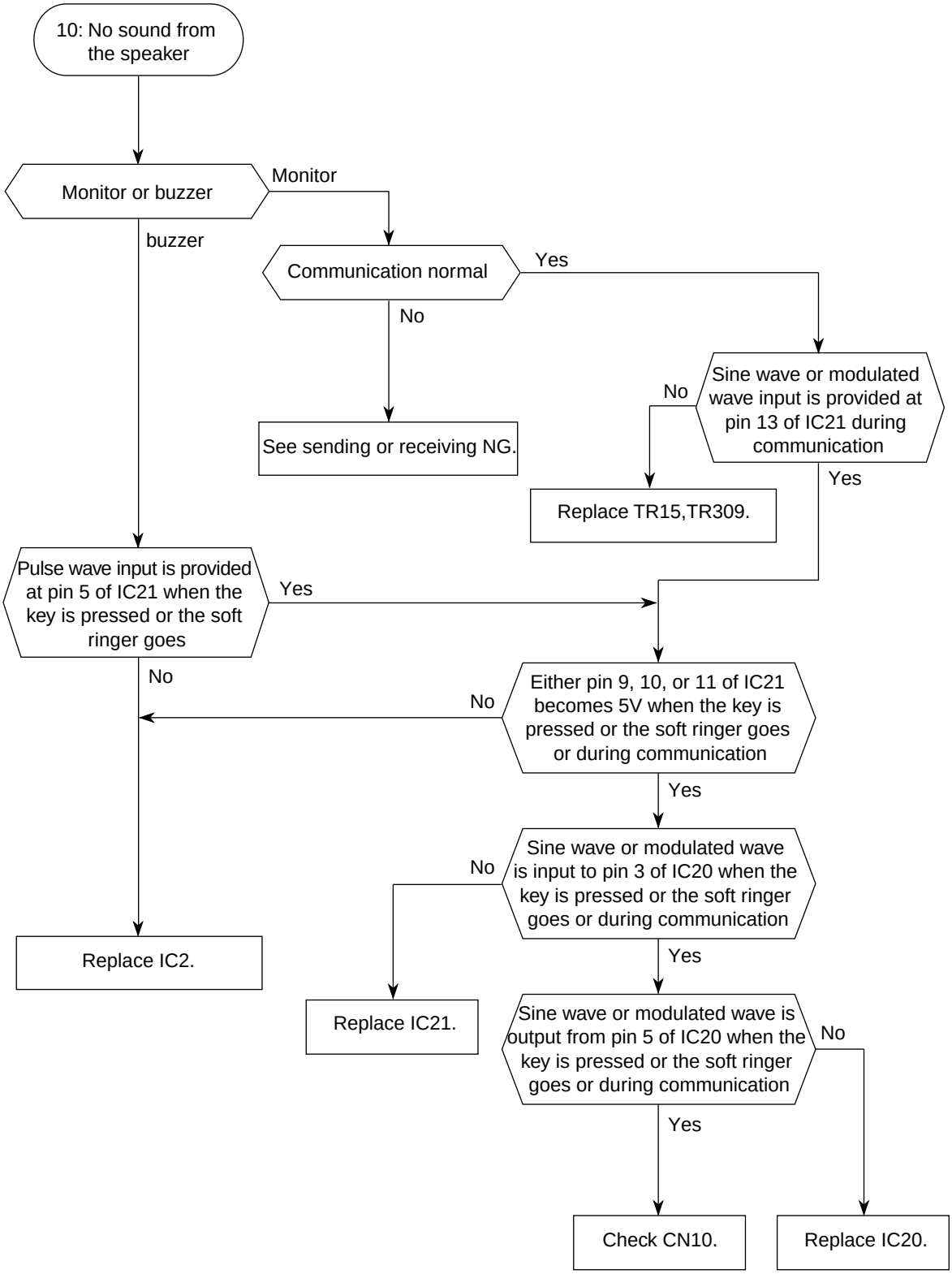
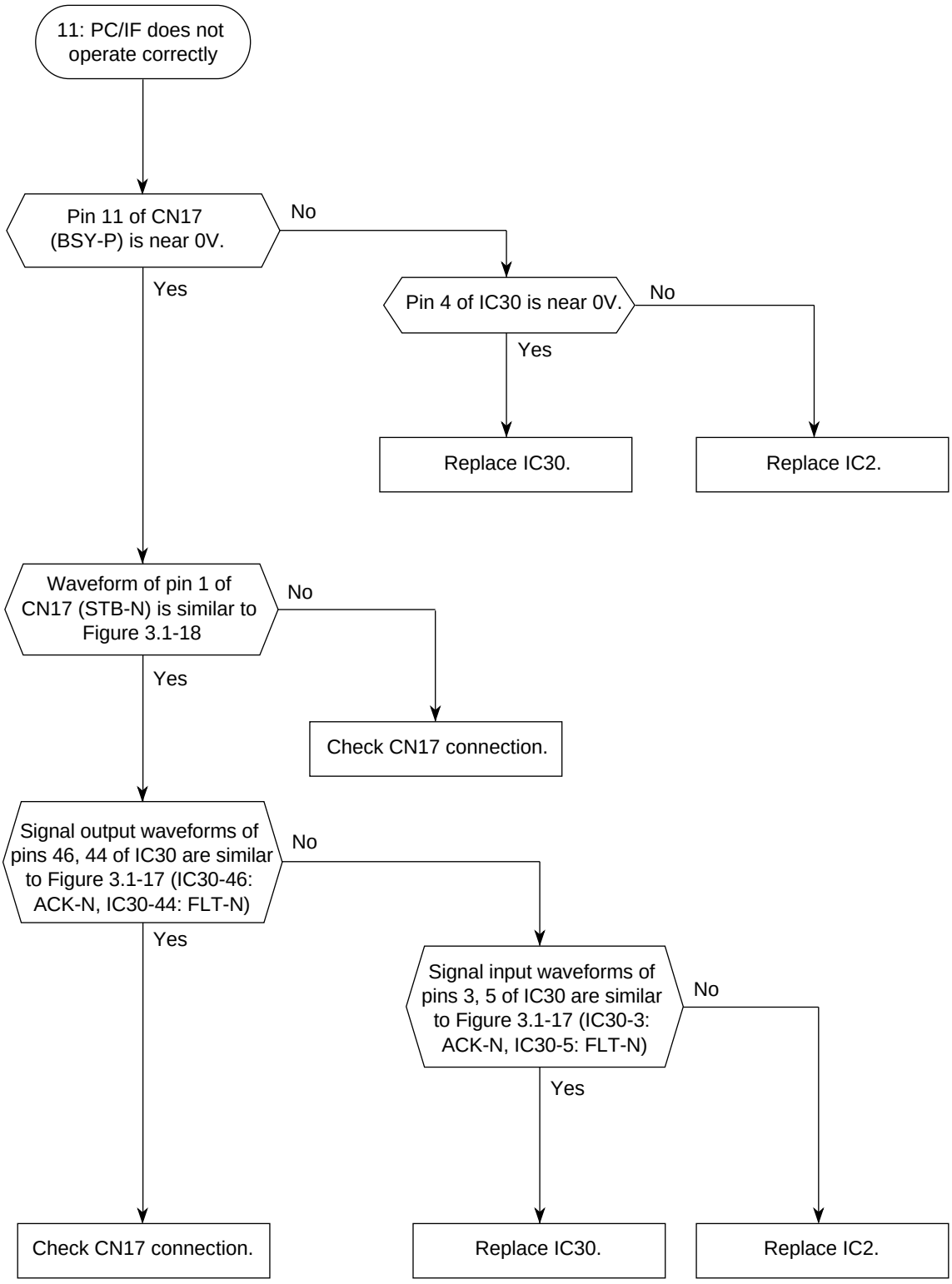


Fig. 3.1-16 RTC Time Set

3.1.10 No sound from the speaker


10: No sound from the speaker
Monitor or buzzer
Monitor
buzzer
Communication normal
Yes
No
See sending or receiving NG.
Sine wave or modulated wave input is provided at pin 13 of IC21 during communication
No
Yes
Replace TR15,TR309.
Pulse wave input is provided at pin 5 of IC21 when the key is pressed or the soft ringer goes
Yes
No
Either pin 9, 10, or 11 of IC21 becomes 5V when the key is pressed or the soft ringer goes or during communication
No
Yes
Sine wave or modulated wave is input to pin 3 of IC20 when the key is pressed or the soft ringer goes or during communication
No
Yes
Replace IC2.
Replace IC21.
Sine wave or modulated wave is output from pin 5 of IC20 when the key is pressed or the soft ringer goes or during communication
No
Yes
Check CN10.
Replace IC20.

3.1.11 PC I/F does not operate correctly


11: PC/IF does not operate correctly
Pin 11 of CN17 (BSY-P) is near 0V.
No
Yes
Pin 4 of IC30 is near 0V.
No
Yes
Replace IC30.
Replace IC2.
Waveform of pin 1 of CN17 (STB-N) is similar to Figure 3.1-18
No
Yes
Check CN17 connection.
Signal output waveforms of pins 46, 44 of IC30 are similar to Figure 3.1-17 (IC30-46: ACK-N, IC30-44: FLT-N)
No
Yes
Signal input waveforms of pins 3, 5 of IC30 are similar to Figure 3.1-17 (IC30-3: ACK-N, IC30-5: FLT-N)
No
Yes
Check CN17 connection.
Replace IC30.
Replace IC2.

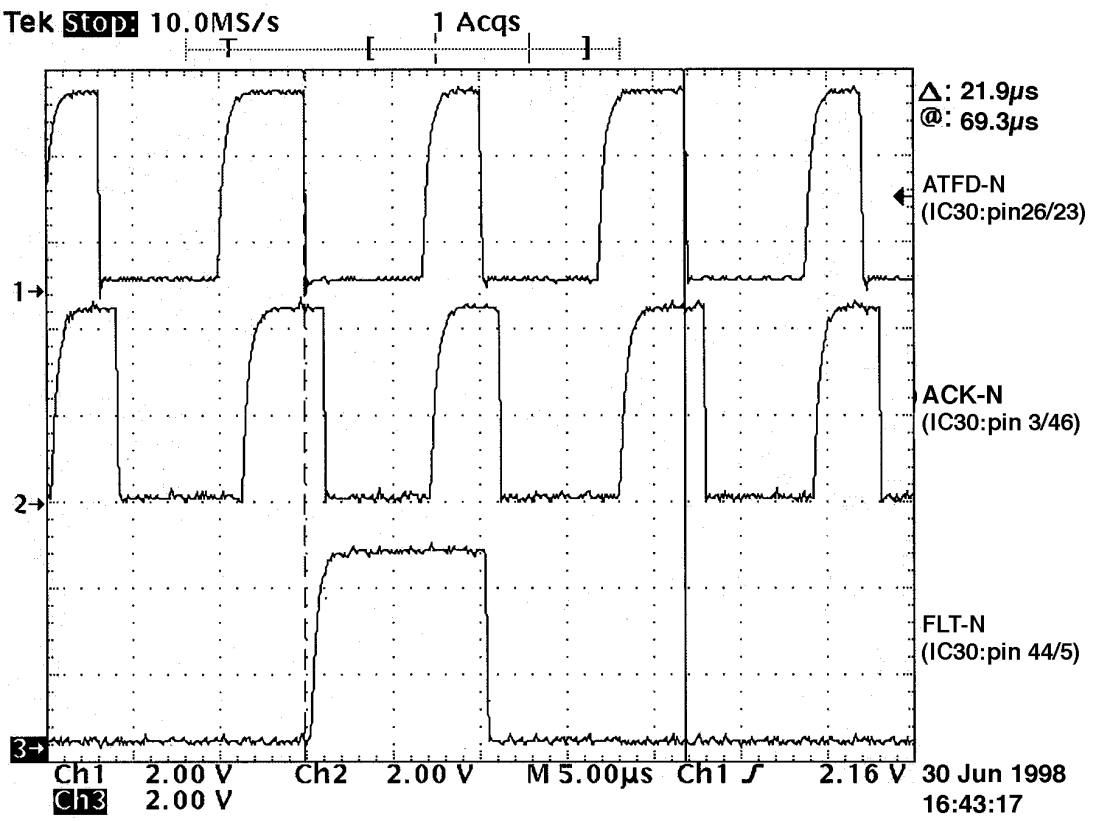


Fig. 3.1-17

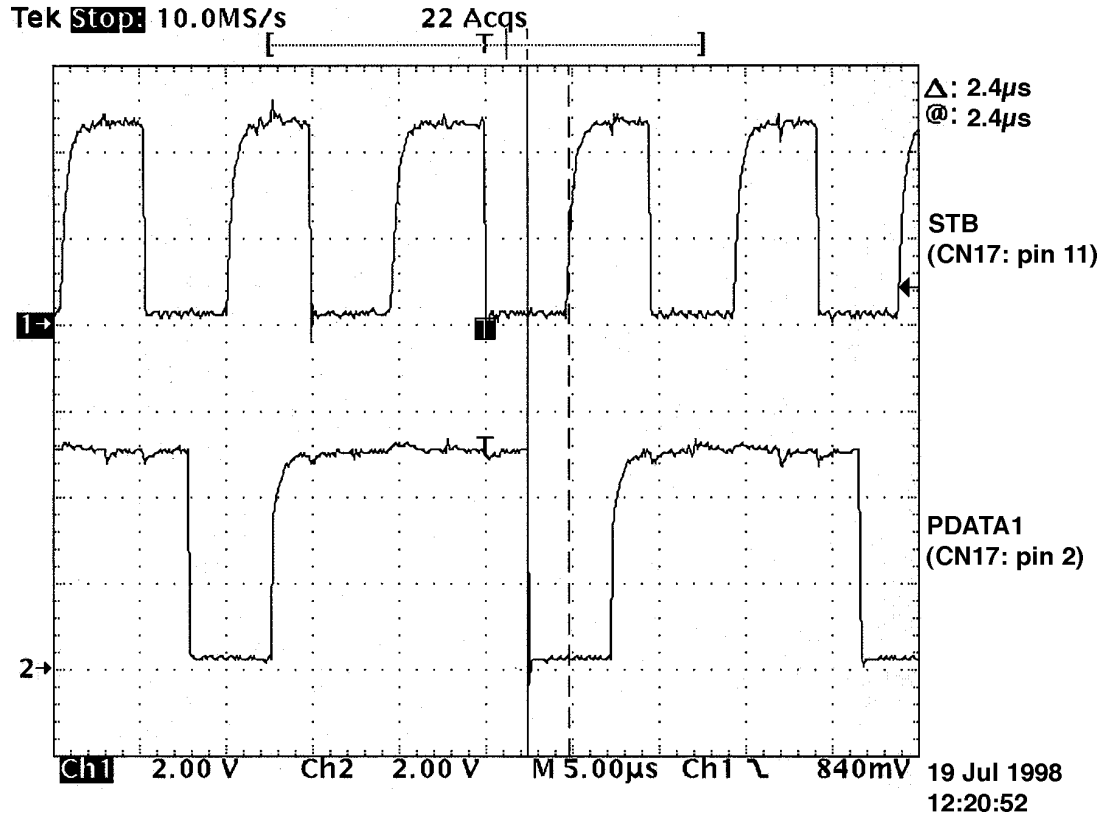
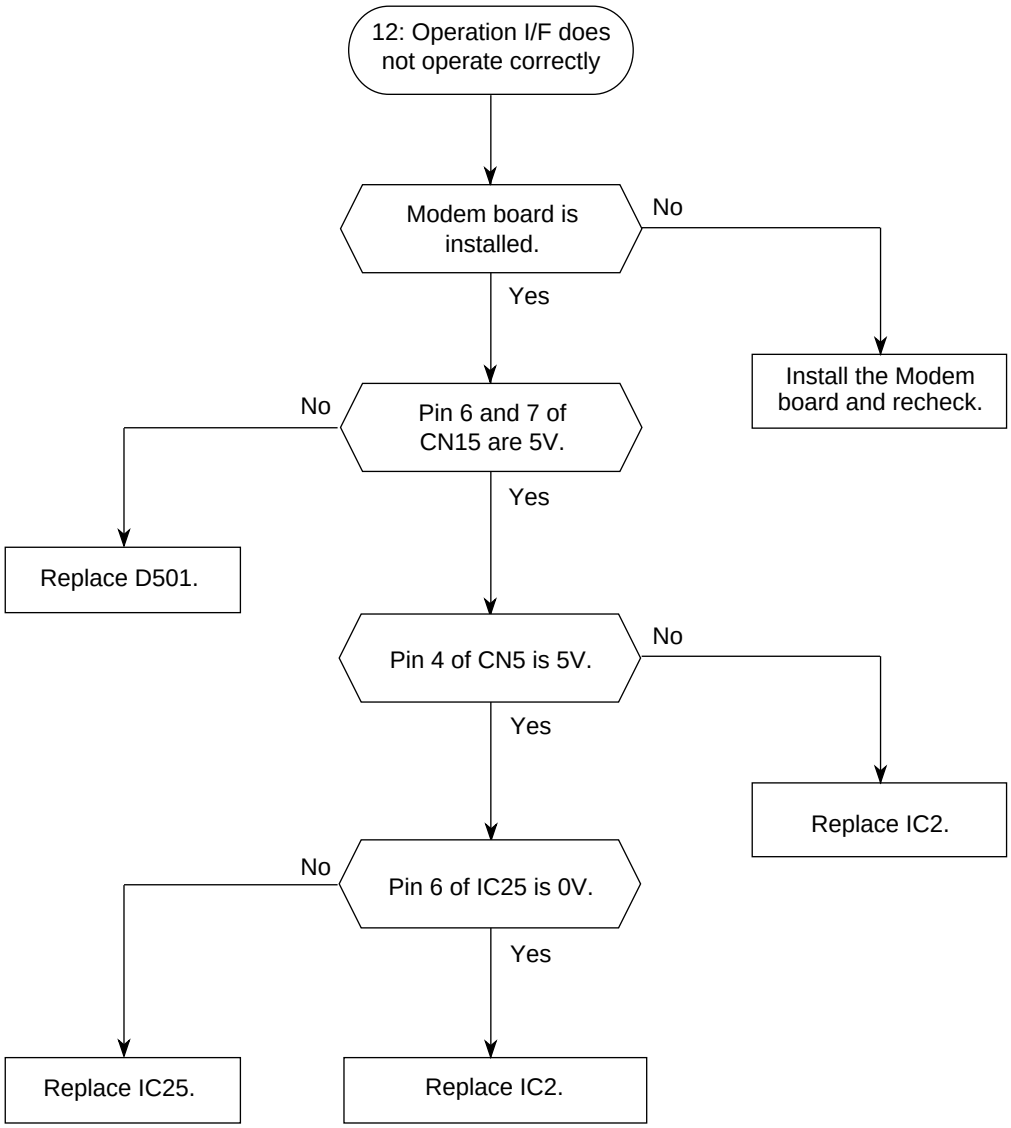
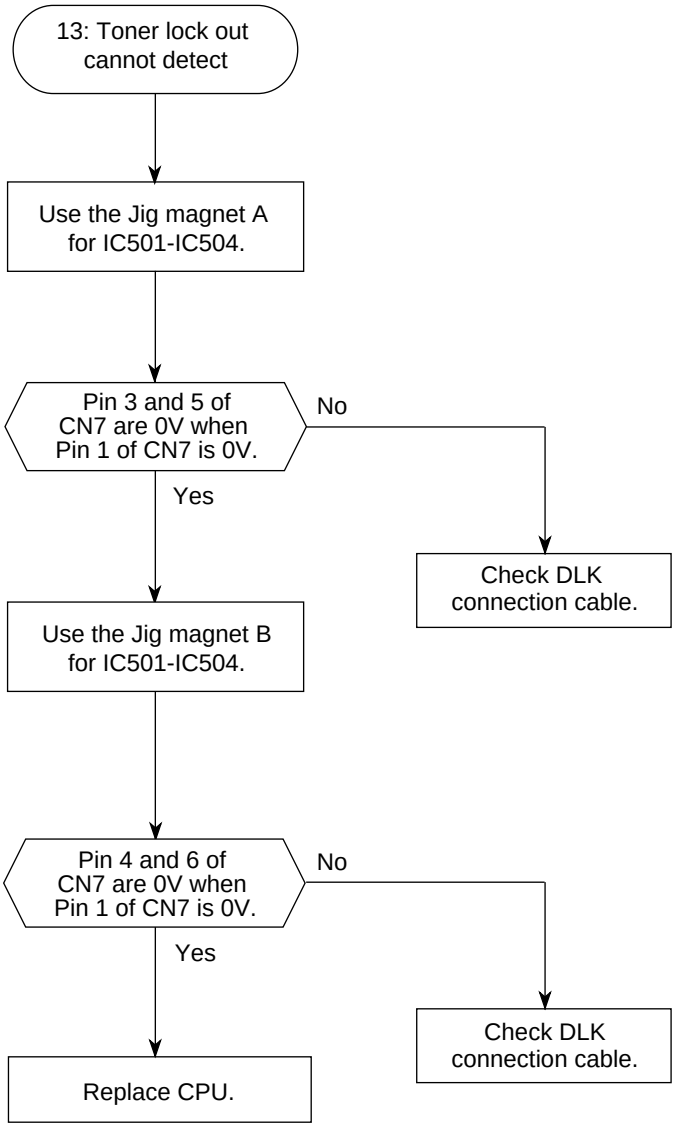


Fig. 3.1-18

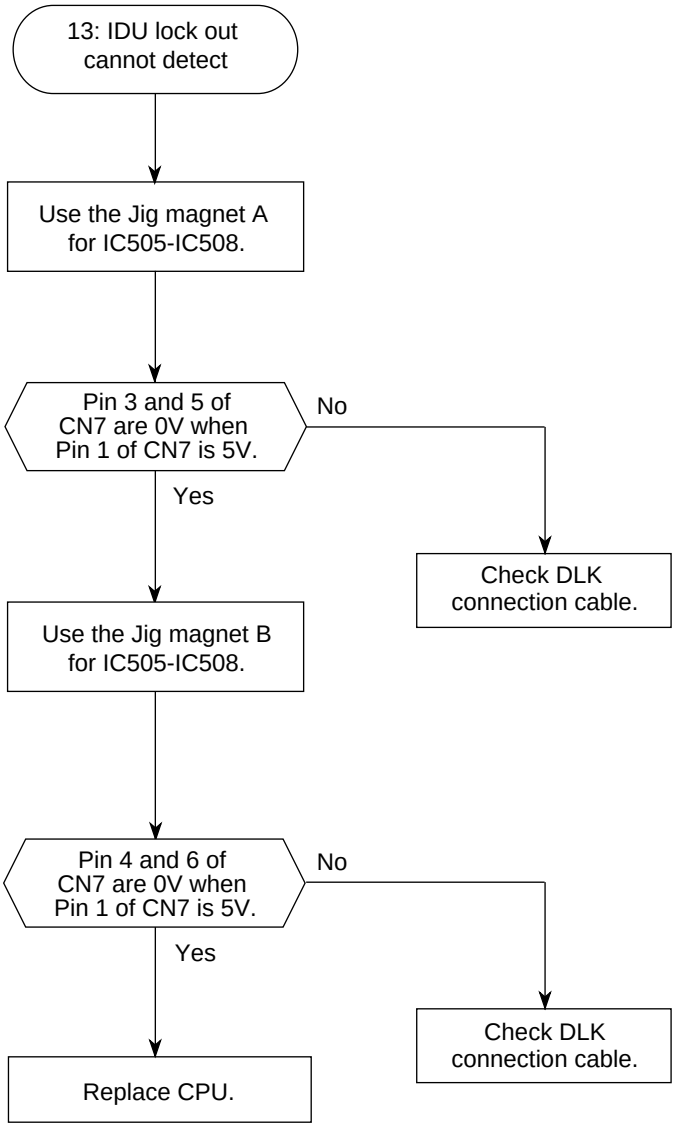
3.1.12 Operation I/F not operating correctly



3.1.13.1 Toner lock out detect NG

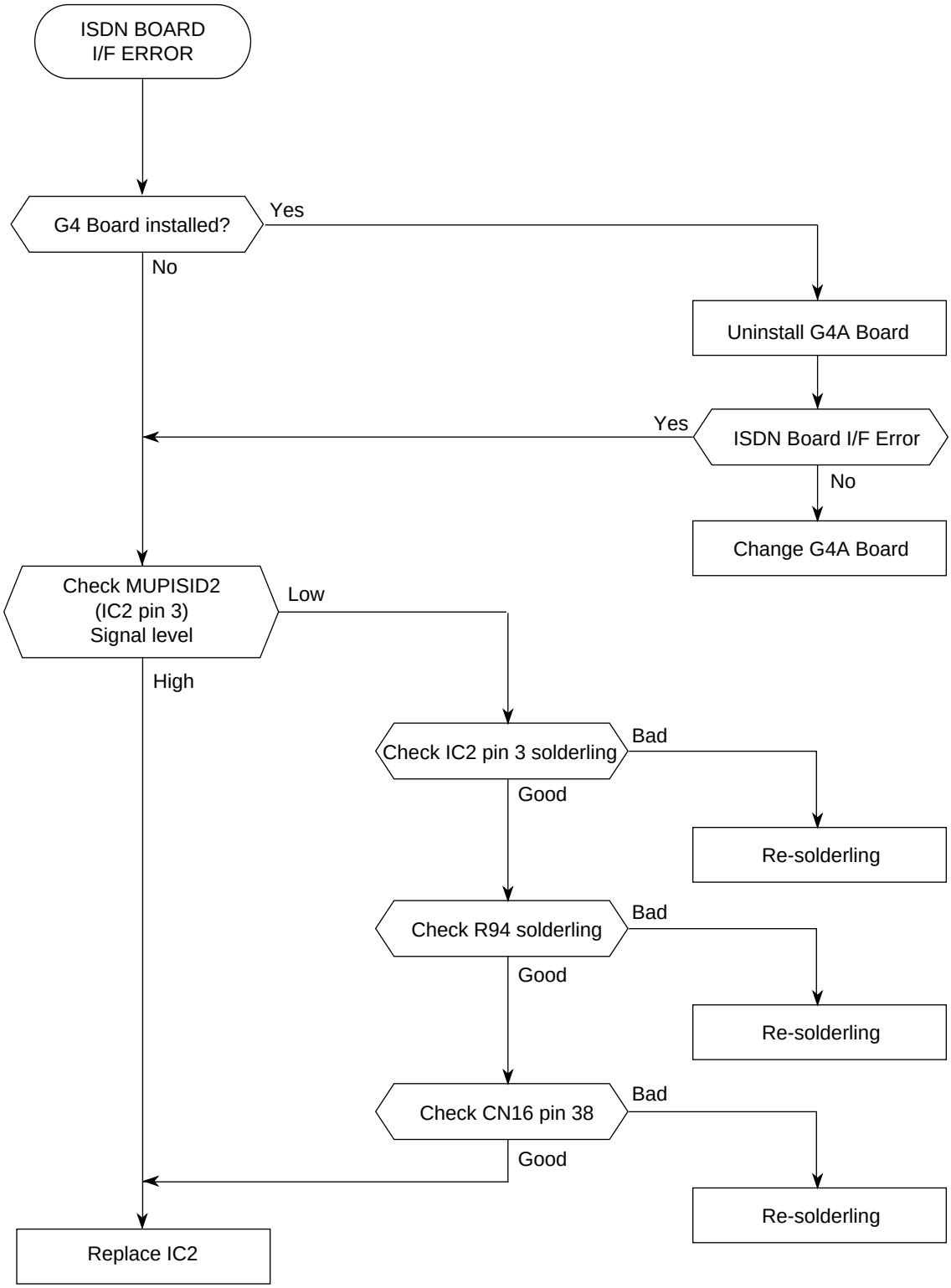

13: Toner lock out cannot detect
Use the Jig magnet A for IC501-IC504.
Pin 3 and 5 of CN7 are 0V when Pin 1 of CN7 is 0V.
No
Yes
Check DLK connection cable.
Use the Jig magnet B for IC501-IC504.
Pin 4 and 6 of CN7 are 0V when Pin 1 of CN7 is 0V.
No
Yes
Check DLK connection cable.
Replace CPU.

3.1.13.2 IDU lock out detect NG

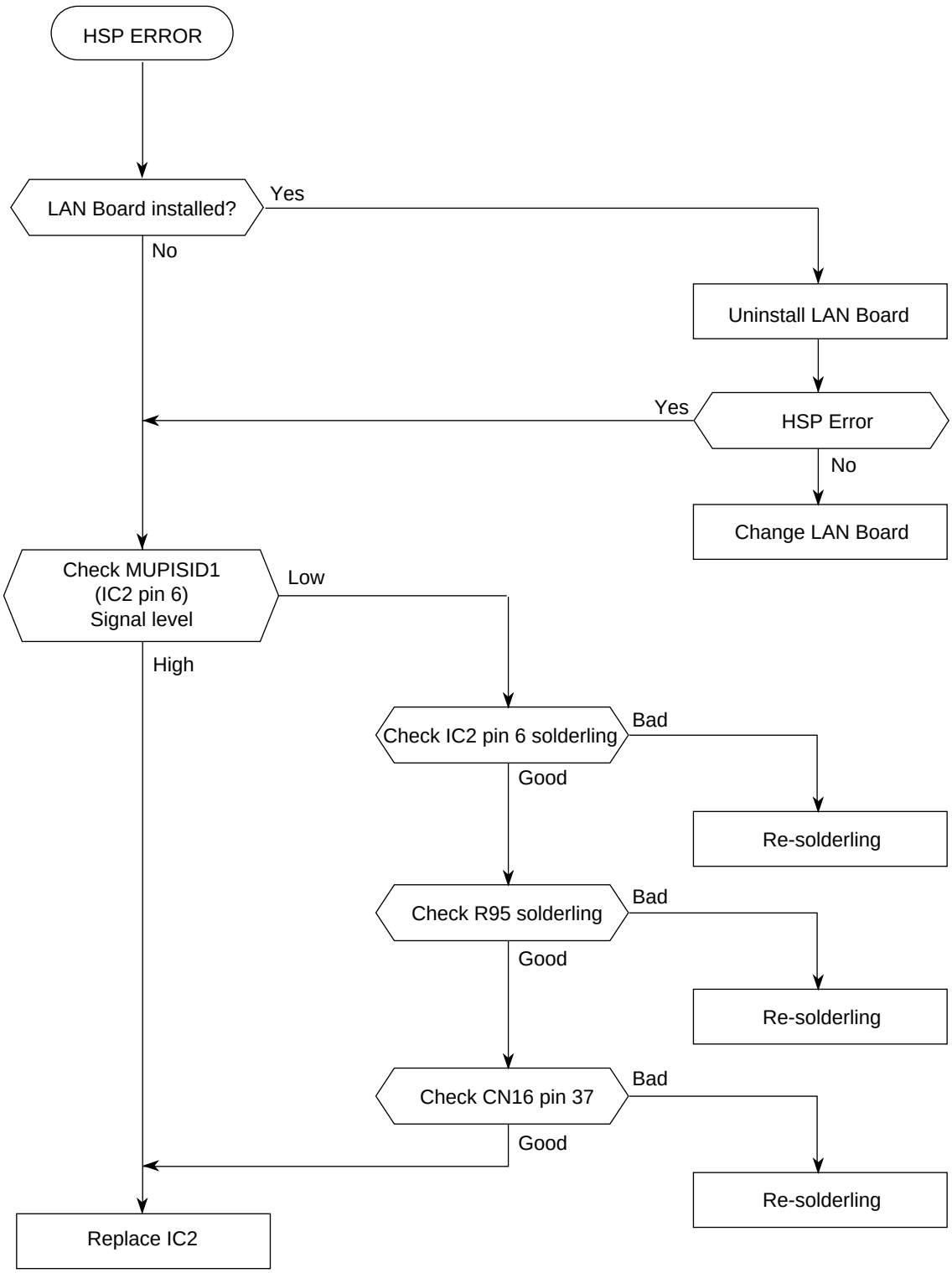

13: IDU lock out cannot detect
Use the Jig magnet A for IC505-IC508.
Pin 3 and 5 of CN7 are 0V when Pin 1 of CN7 is 5V.
No
Yes
Check DLK connection cable.
Use the Jig magnet B for IC505-IC508.
Pin 4 and 6 of CN7 are 0V when Pin 1 of CN7 is 5V.
No
Yes
Check DLK connection cable.
Replace CPU.

3.1.14 LAN/G4/G3 error

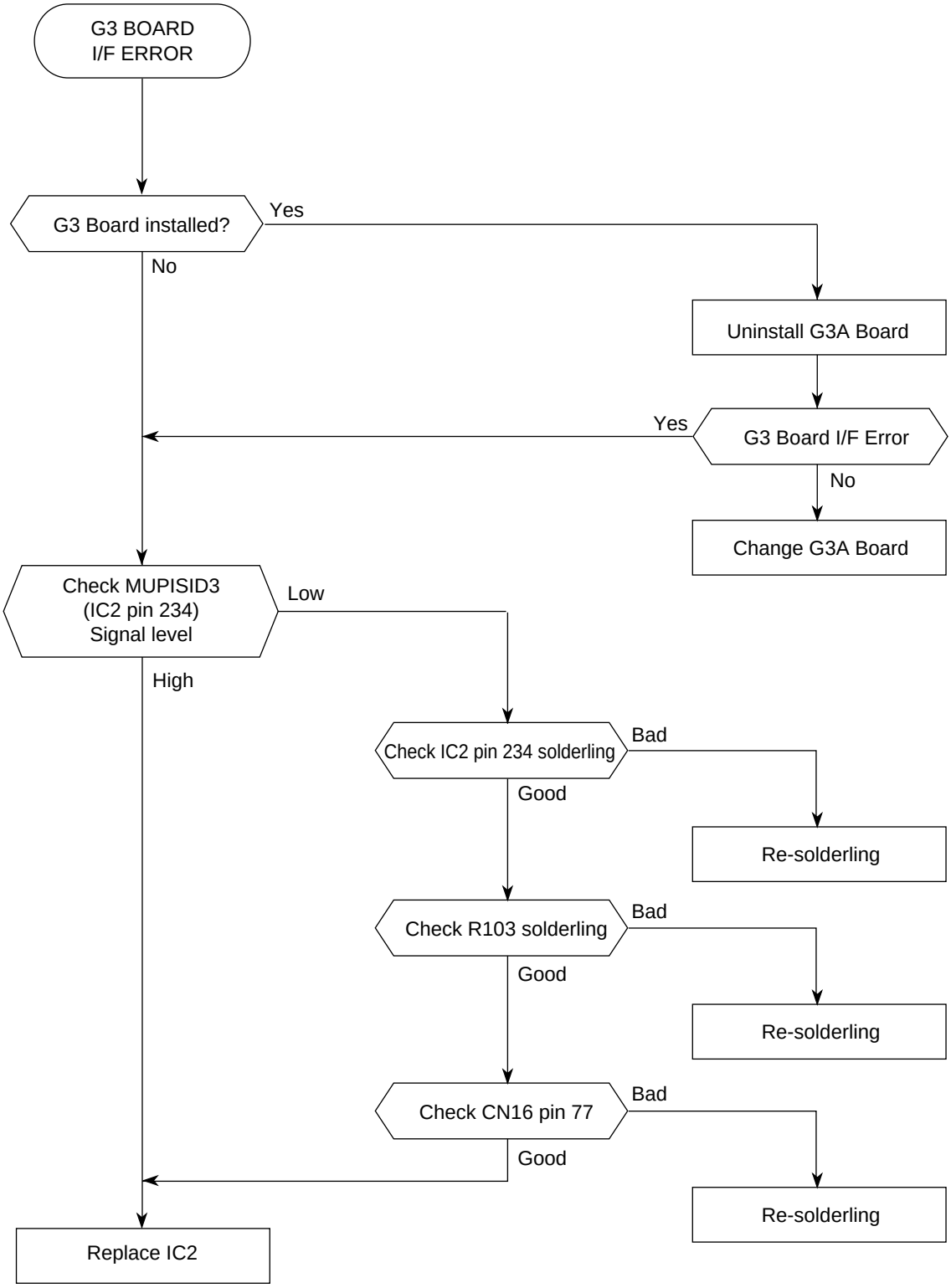
3.1.14.1 ISDN board I/F error



3.1.14.2 HSP error

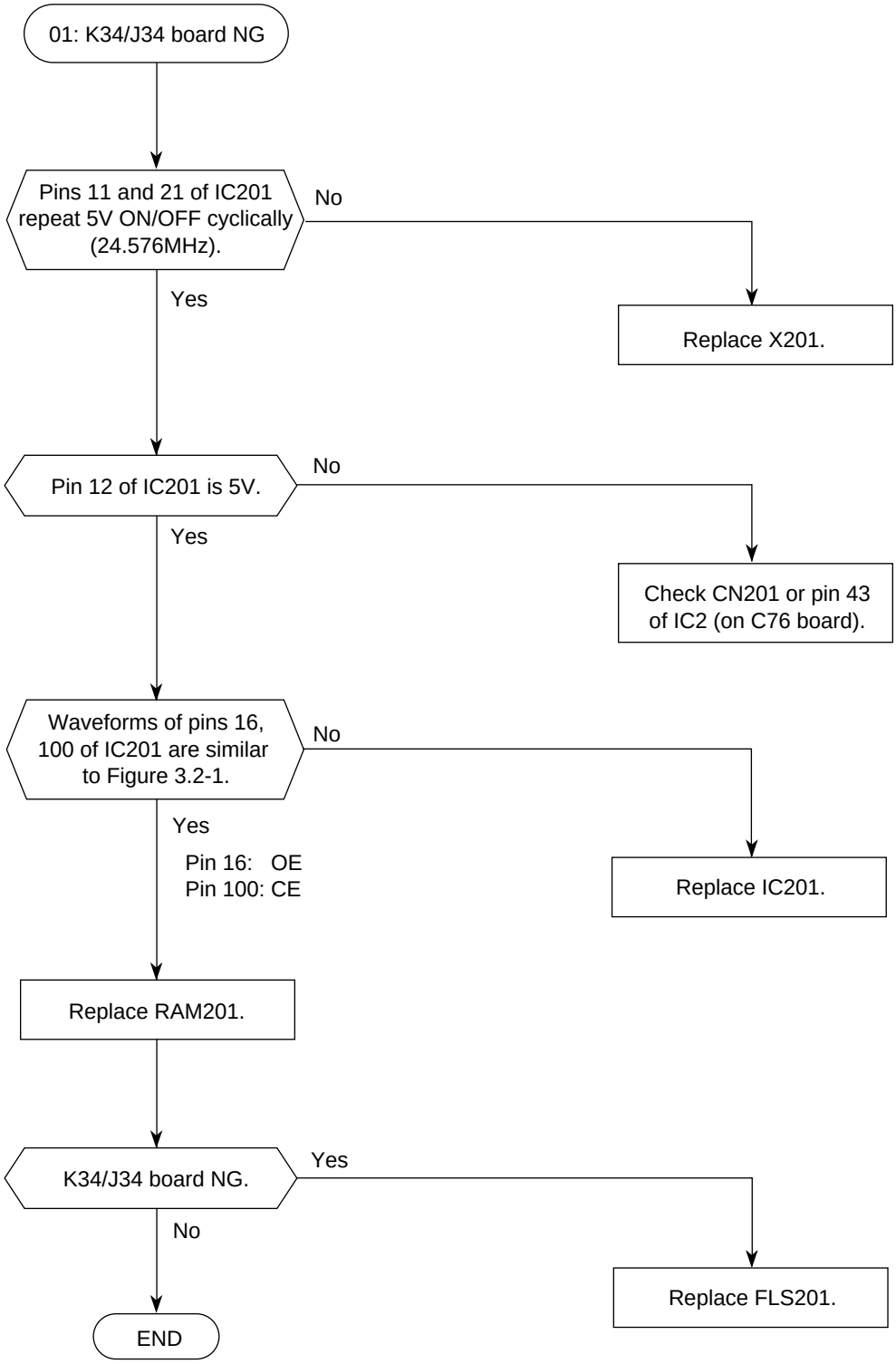


3.1.14.3 G3 board I/F error



3.2 V.34 Modem board E76 (K34) or J34

3.2.1 K34/J34 board NG



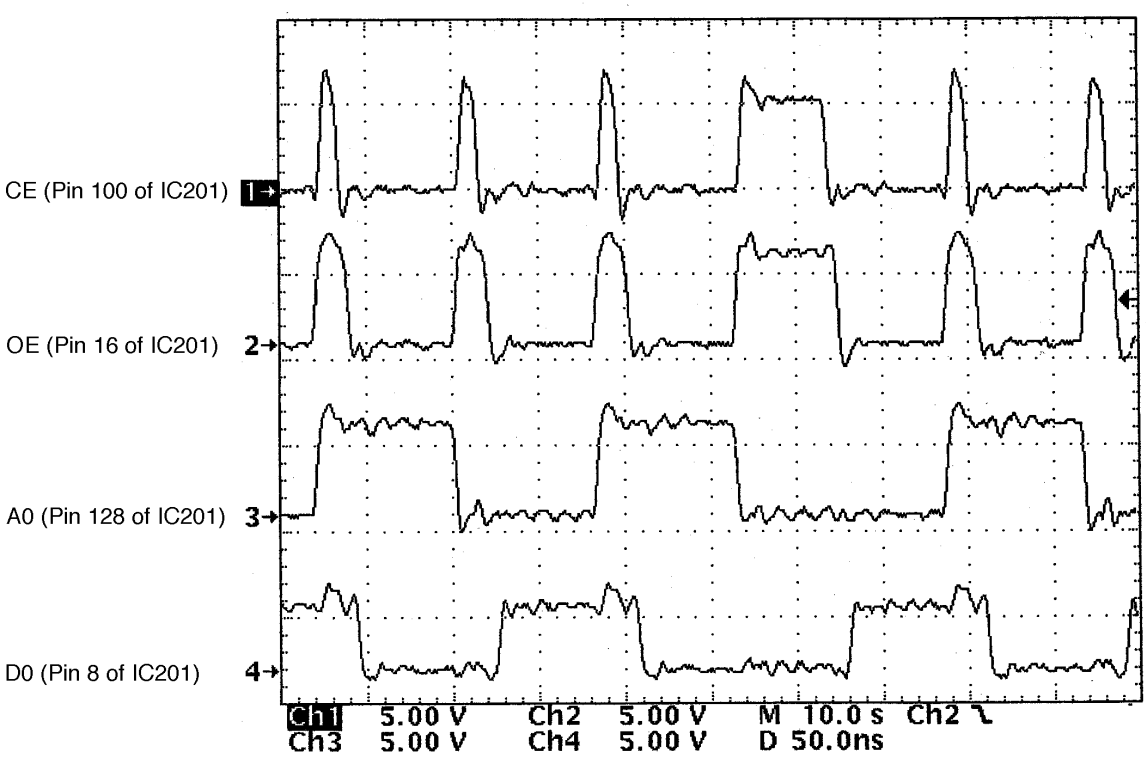
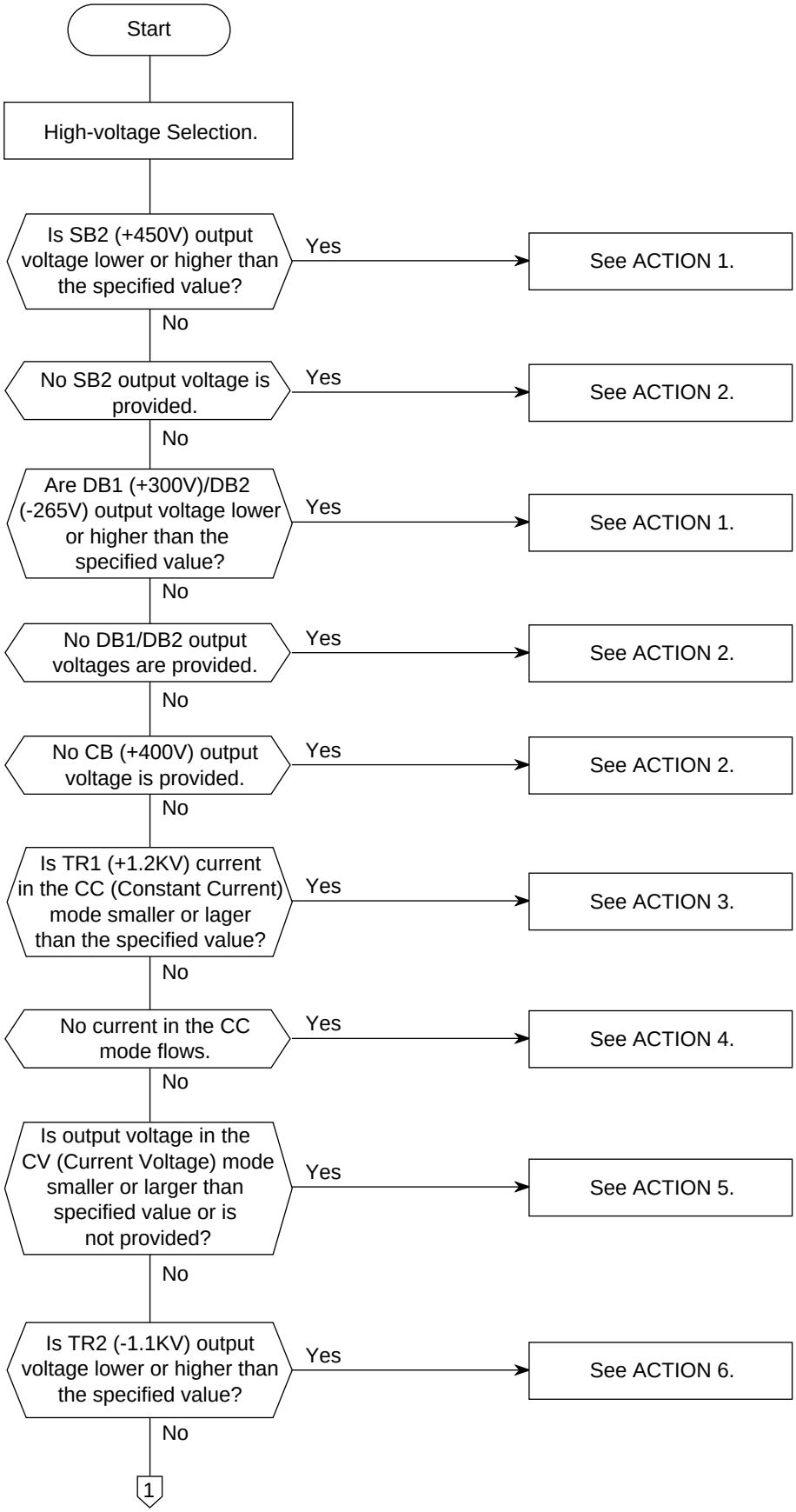
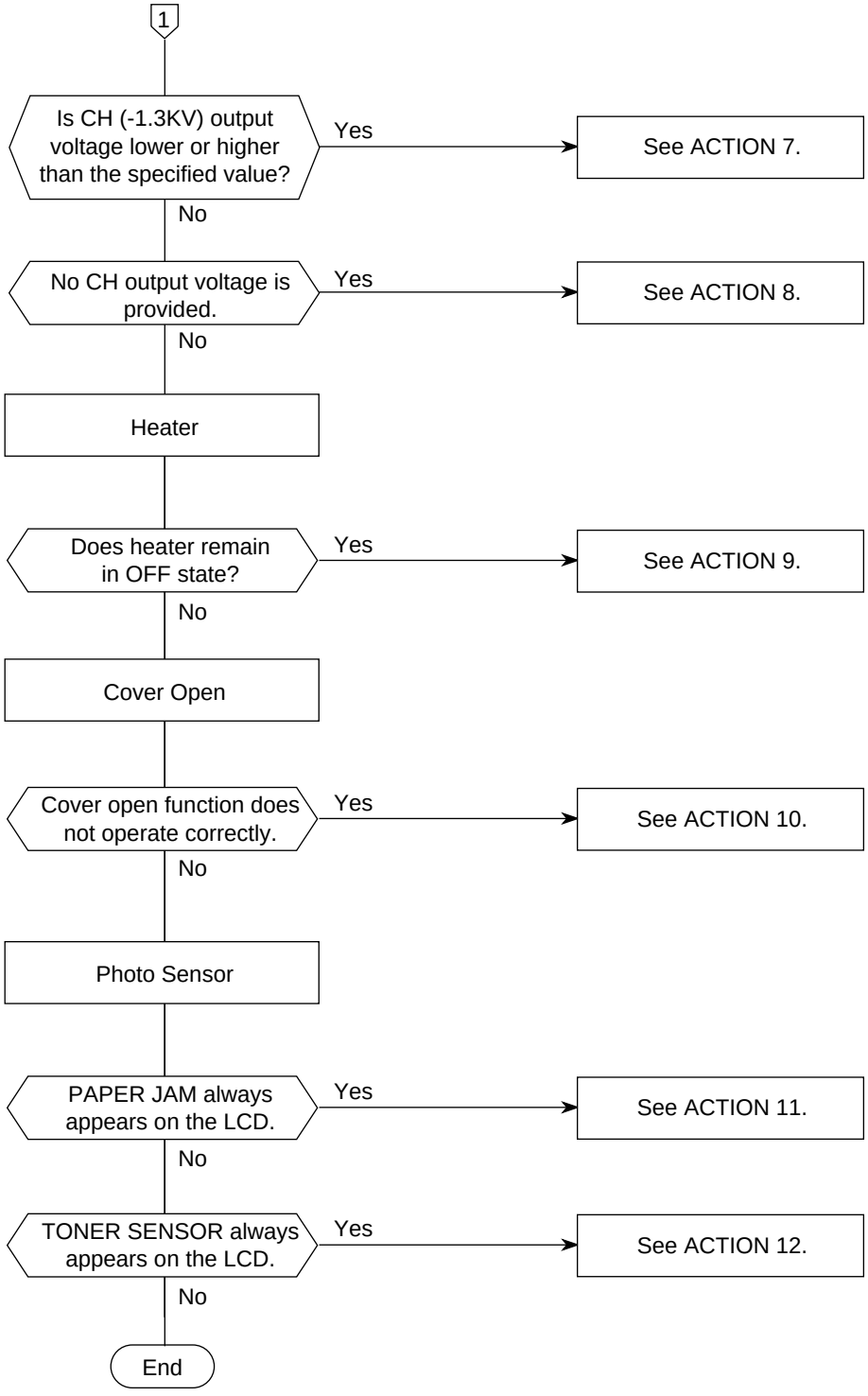

CE (Pin 100 of IC201)
OE (Pin 16 of IC201)
A0 (Pin 128 of IC201)
D0 (Pin 8 of IC201)
1
2
3
4
Ch1 5.00 V Ch2 5.00 V M 10.0 s Ch2
Ch3 5.00 V Ch4 5.00 V D 50.0ns

Fig. 3.2-1

3.3 High voltage control board H10



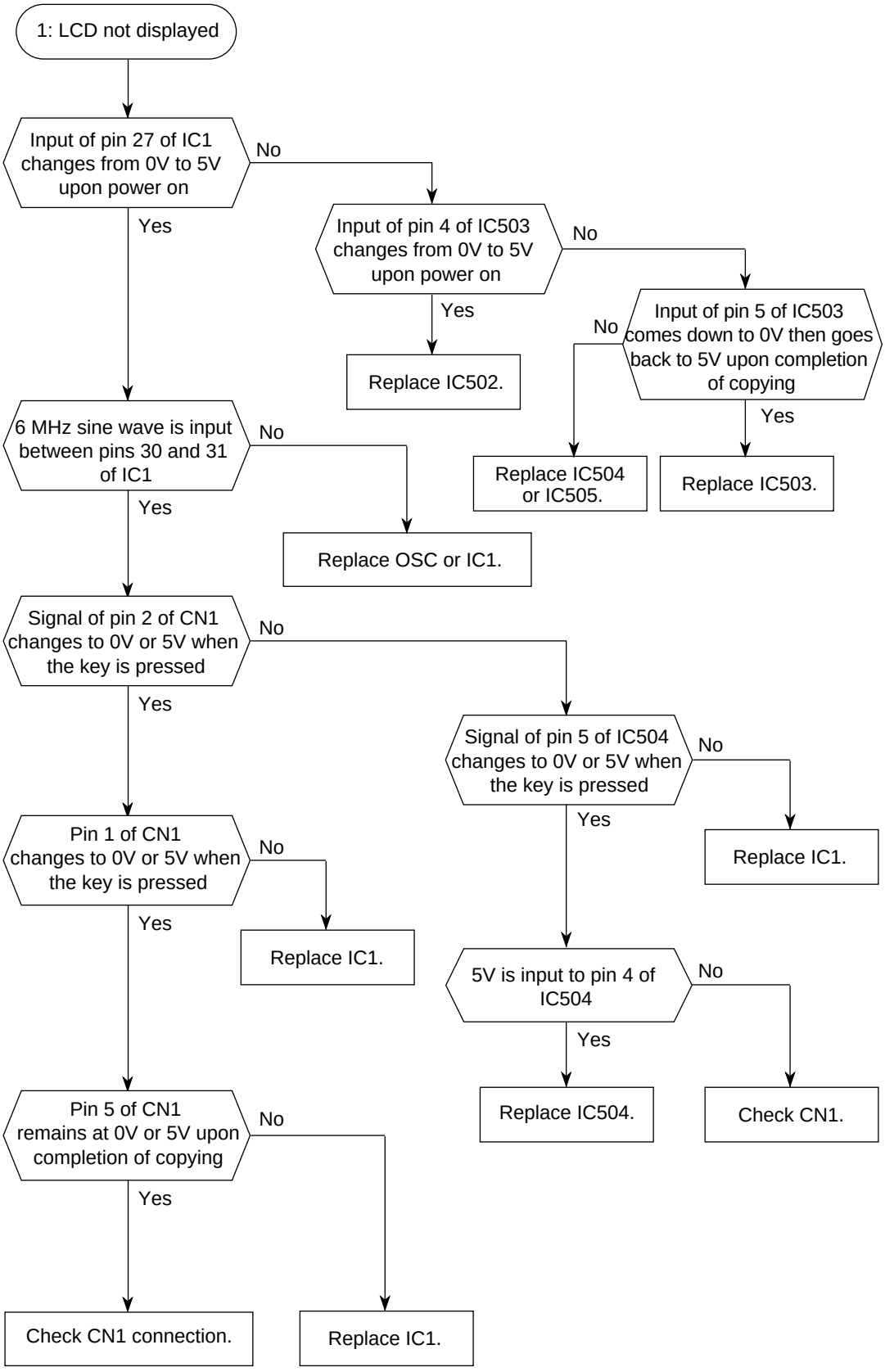

1
Is CH (-1.3KV) output voltage lower or higher than the specified value?
Yes
See ACTION 7.
No
No CH output voltage is provided.
Yes
See ACTION 8.
No
Heater
Does heater remain in OFF state?
Yes
See ACTION 9.
No
Cover Open
Cover open function does not operate correctly.
Yes
See ACTION 10.
No
Photo Sensor
PAPER JAM always appears on the LCD.
Yes
See ACTION 11.
No
TONER SENSOR always appears on the LCD.
Yes
See ACTION 12.
No
End

Action Item:

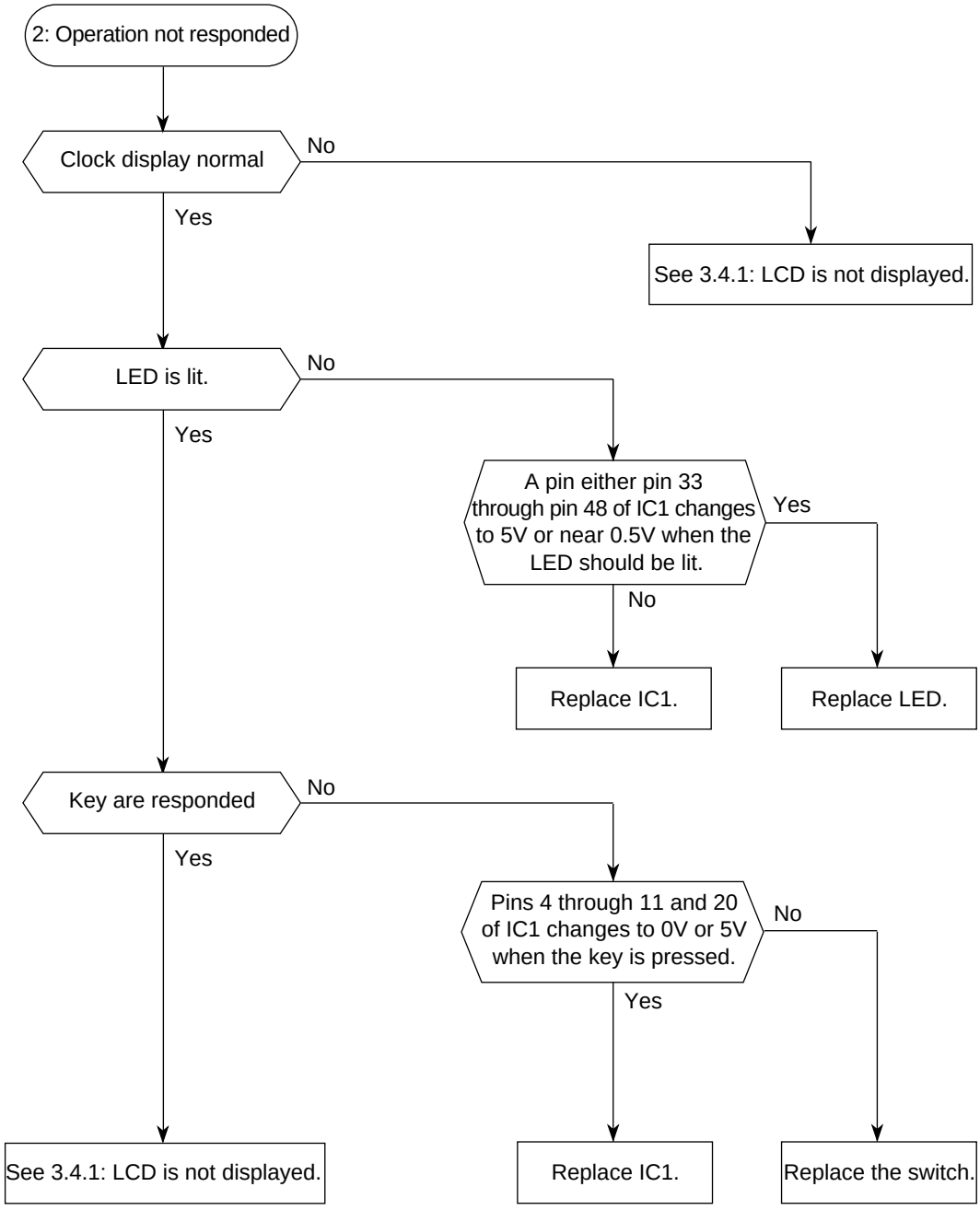
No.	ACTION
1	Probable cause 1: D129 is defective. Check item 1: Replace D129. Probable cause 2: The load is larger than the normal value. Check item 2: Check if the load current is 2μA or less.
2	Probable cause 1: LSI or OSC is defective. Check item 1: Check the PWM waveform of DB output. Probable cause 2: Q106 is malfunctioning. Check item 2: Replace Q106
3	Probable cause 1: LSI or OSC is defective. Check item 1: Check the PWM waveform of TR1 output.
4	Probable cause 1: T2 is defective. Check item 1: Replace T2. Probable cause 2: LSI or OSC is defective. Check item 2: Check the PWM waveform of TR1 output.
5	Probable cause 1: T2 is defective. Check item 1: Replace T2.
6	Probable cause 1: DD117, D118 or DD135 is defective. Check item 1: Check if these diodes are IZB 390. Probable cause 2: LSI or OSC is defective. Check item 2: Check the PWM waveform of TR2 output.
7	Probable cause 1: The class of D124 or D125 is incorrect. Check item 1: Check if both D124 and D125 are of EB-2 class. Probable cause 2: The load current is lower than the specified value. Check item 2: The load current shall be 10 to 20μA. (Namely, the load current shall not be more than or less than this limit range.)
8	Probable cause 1: LSI or OSC is defective. Check item 1: check the PWM waveform of CH output.
9	Probable cause 1: HEAT-NO remains at "L". Check item 1: Check whether the collector of Q7 becomes "H". If Q7 is "L", go to the probable cause 2. If Q7 is "H", other board may be damaged. Probable cause 2: IC4, Q6, or Q7 is defective. Check item 2: Replace IC4, Q6 or Q7 If the problem is unsolved, other board may be damaged.
10	Probable cause 1: SW2 is defective. Check item 1: Replace SW2 If the problem is unsolved, other board may be damaged.
11	Probable cause 1: PS1, PS2, PS3 or PS4 is defective. Check item 1: Replace PS1, PS2, PS3 or PS4. If the problem is unsolved, other board may be damaged.
12	Probable cause 1: PS6 is defective. Check item 1: Replace PS6 If the problem is unsolved, other board may be damaged.

3.4 Operation control board P76/P77, and LCD unit

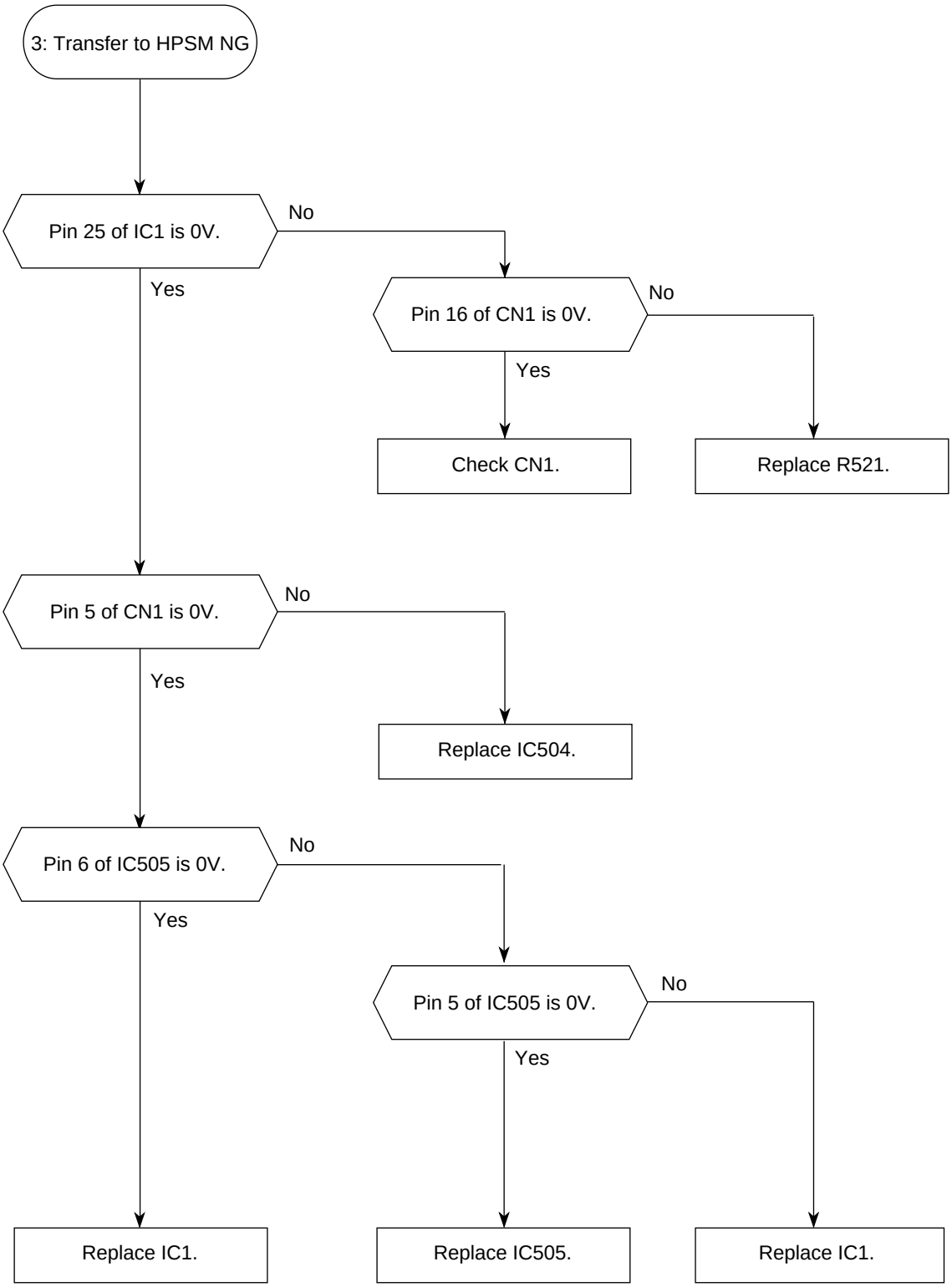
3.4.1 LCD not displayed


1: LCD not displayed
Input of pin 27 of IC1 changes from 0V to 5V upon power on
No
Yes
Input of pin 4 of IC503 changes from 0V to 5V upon power on
No
Yes
Replace IC502.
Input of pin 5 of IC503 comes down to 0V then goes back to 5V upon completion of copying
No
Yes
Replace IC504 or IC505.
Replace IC503.
6 MHz sine wave is input between pins 30 and 31 of IC1
No
Yes
Replace OSC or IC1.
Signal of pin 2 of CN1 changes to 0V or 5V when the key is pressed
No
Yes
Signal of pin 5 of IC504 changes to 0V or 5V when the key is pressed
No
Yes
Replace IC1.
Pin 1 of CN1 changes to 0V or 5V when the key is pressed
No
Yes
Replace IC1.
5V is input to pin 4 of IC504
No
Yes
Replace IC504.
Check CN1.
Pin 5 of CN1 remains at 0V or 5V upon completion of copying
No
Yes
Check CN1 connection.
Replace IC1.

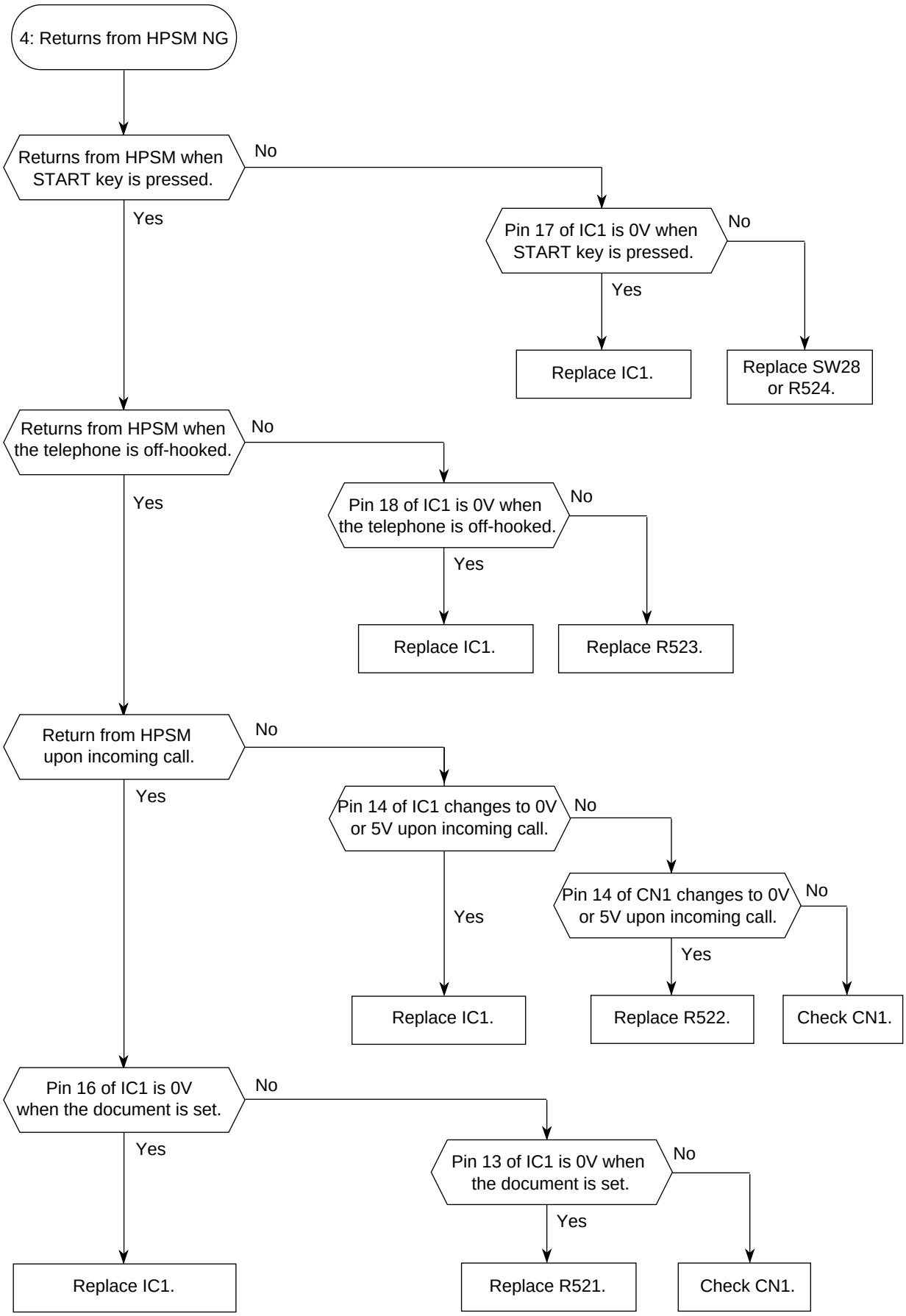
3.4.2 Operation not responded



3.4.3 Transfer to hiper power save mode NG



3.4.4 Returns from hiper power save mode NG



3.5 Toner, IDU lock out detect board DLK

3.5.1 Toner lock out detect NG

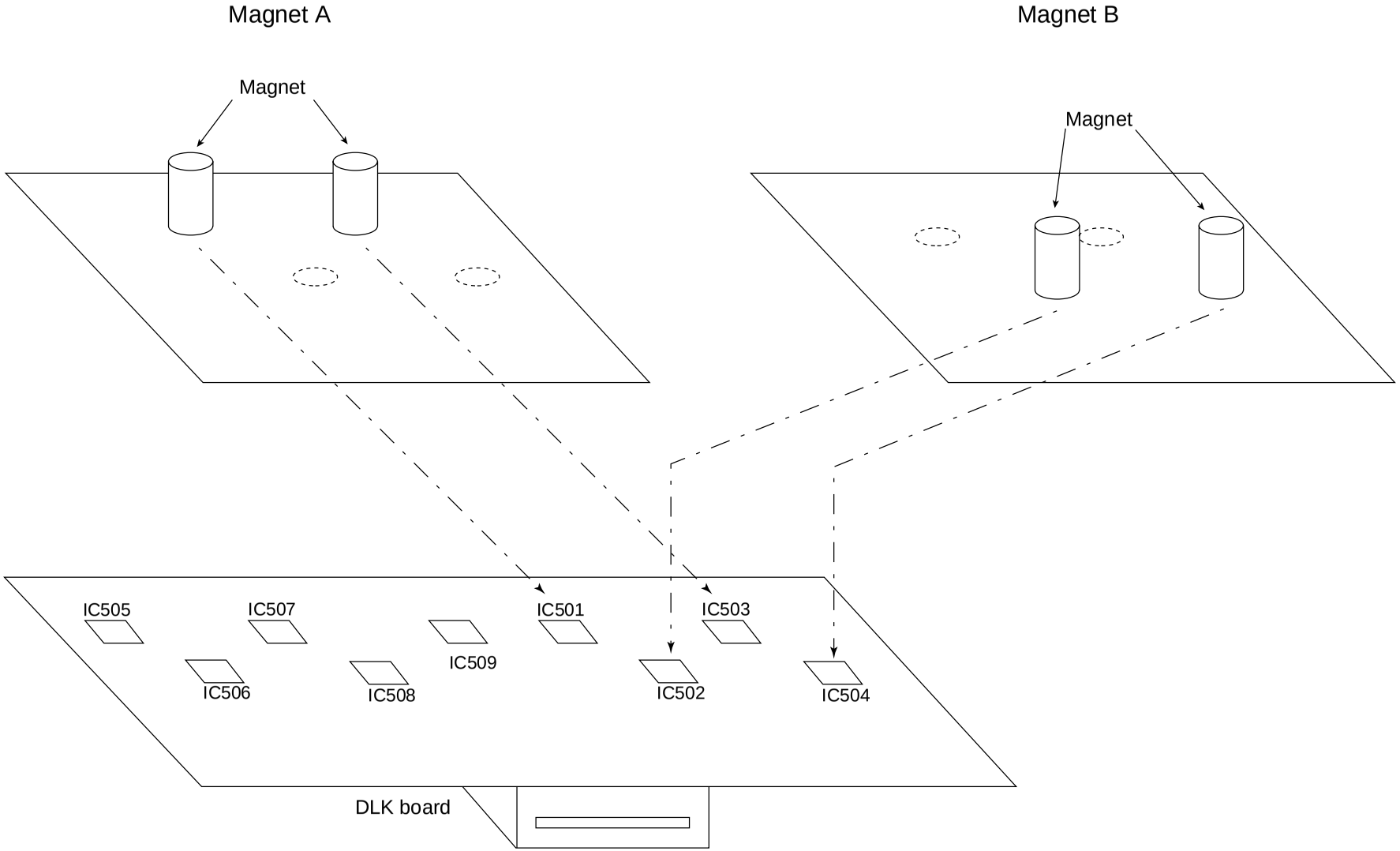
DLK Board Troubleshooting (1)

Troubleshooting of DLK board is as follows:

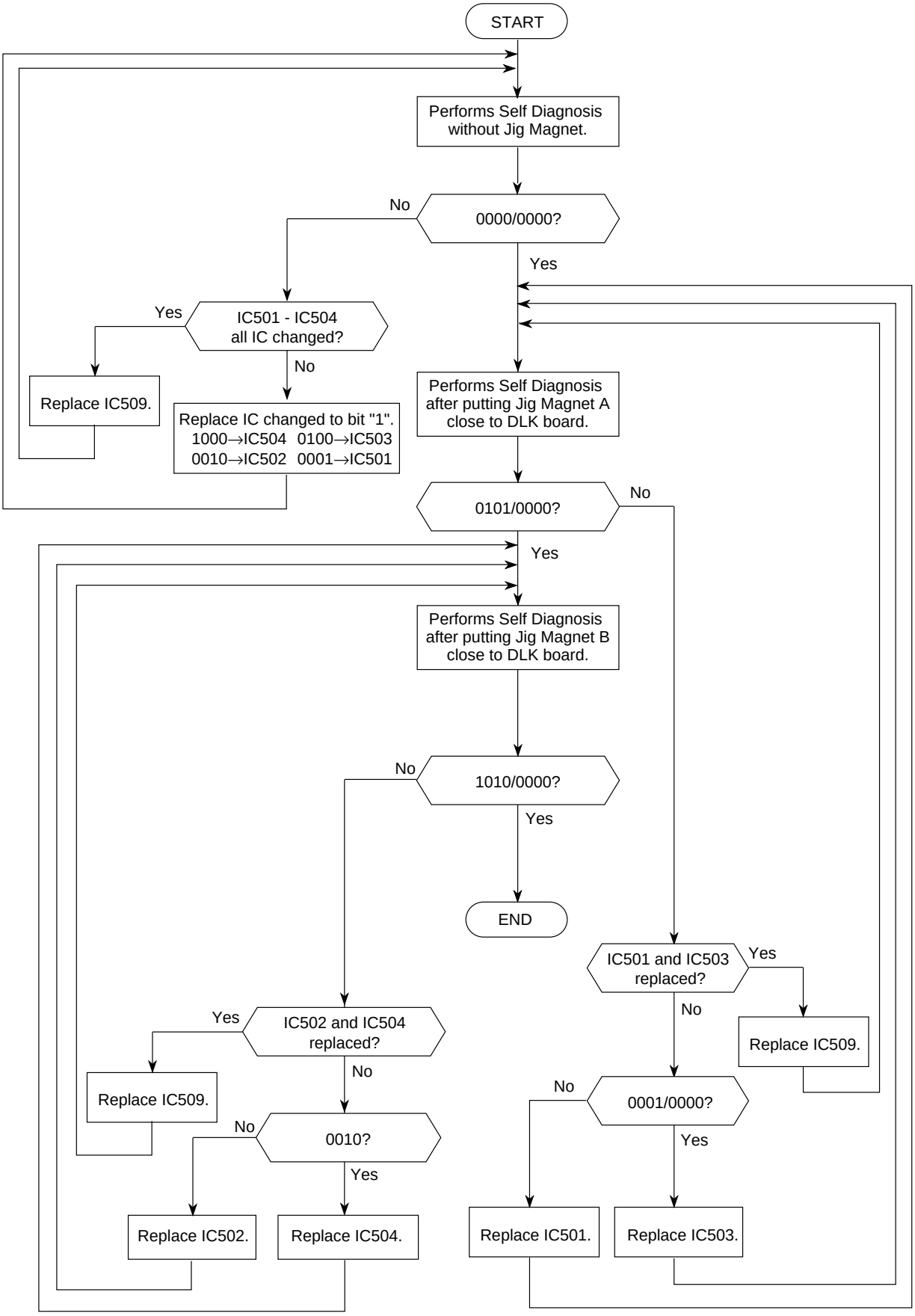
1. • Provide for Jig Magnet A and B as set forth in the Jig Magnet specification.
   • Instead of Jig Magnet, toner cartridge with the magnet at the fixed location can be also used.

2. • Connect to and check the DLK board according to the electric check flow.
   • Result of Self Diagnosis is printed as follows in Self Diagnosis Report: CARTRIDGE (Toner/ID) 1010/0000.

Jig Magnet Specification (1)



3.5.1.1 Electric check flowchart of DLK board



3.5.2 IDU lock out detect NG

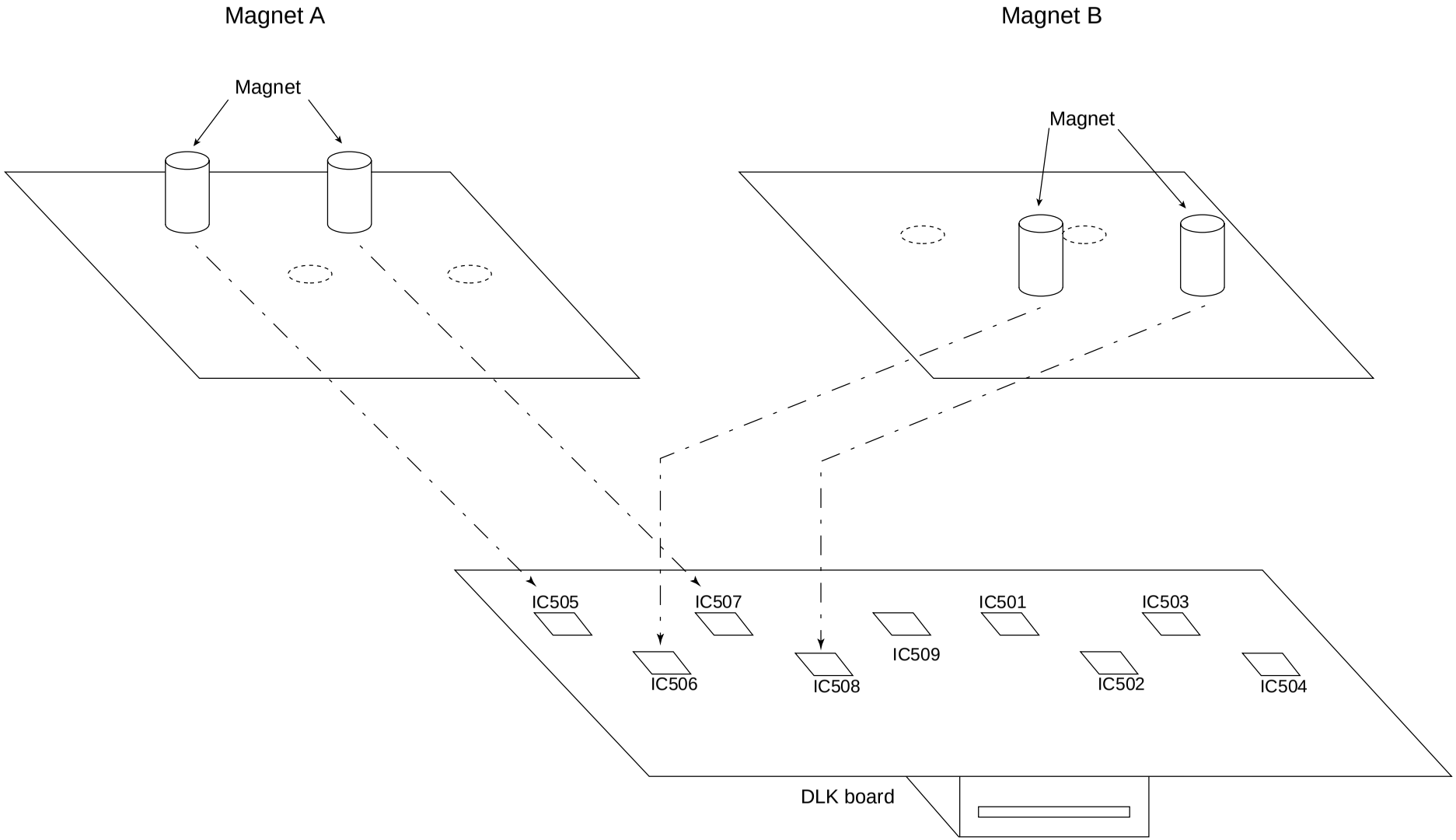
DLK Board Troubleshooting (2)

Troubleshooting of DLK board is as follows:

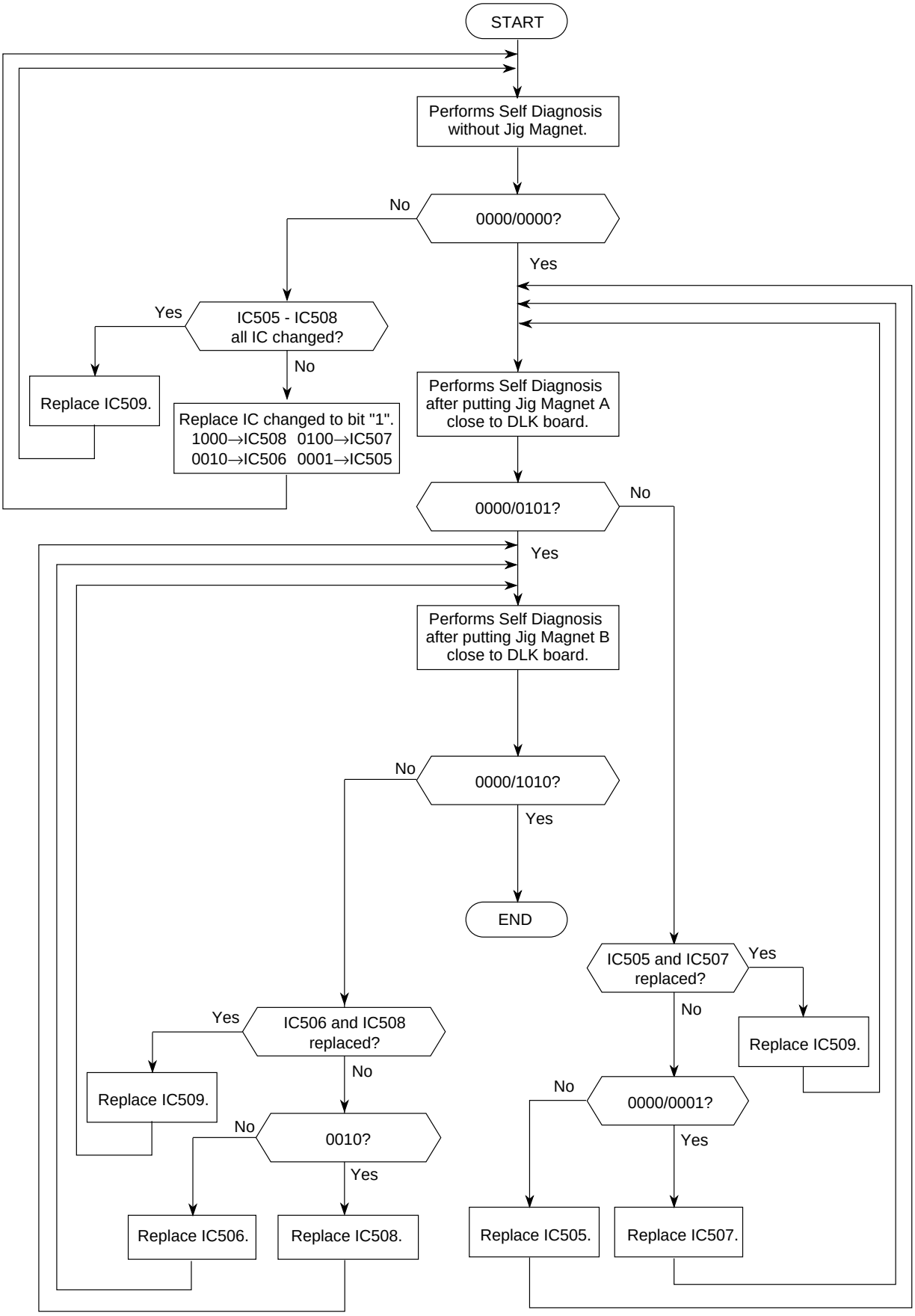
1. • Provide for Jig Magnet A and B as set forth in the Jig Magnet specification.
   • Instead of Jig Magnet, IDU cartridge with the magnet at the fixed location can be also used.

2. • Connect to and check the DLK board according to the electric check flow.
   • Result of Self Diagnosis is printed as follows in Self Diagnosis Report:
   CARTRIDGE (Toner/ID) 0000/1010.

Jig Magnet Specification (2)

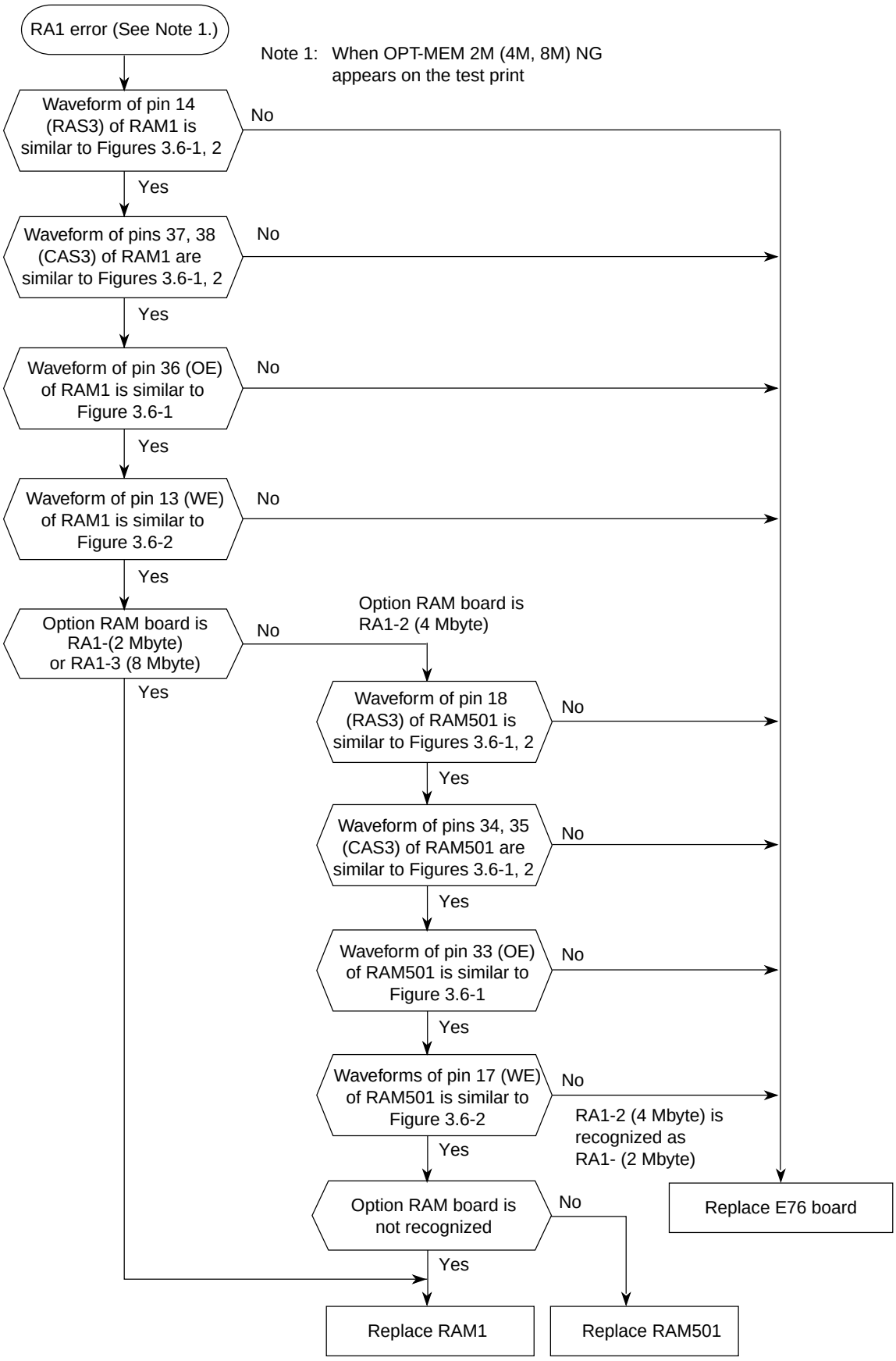


3.5.2.1 Electric check flowchart of DLK board



3.6 Option memory expander board RA1

3.6.1 RA1 error


RA1 error (See Note 1.)
Note 1: When OPT-MEM 2M (4M, 8M) NG appears on the test print
Waveform of pin 14 (RAS3) of RAM1 is similar to Figures 3.6-1, 2
No
Yes
Waveform of pins 37, 38 (CAS3) of RAM1 are similar to Figures 3.6-1, 2
No
Yes
Waveform of pin 36 (OE) of RAM1 is similar to Figure 3.6-1
No
Yes
Waveform of pin 13 (WE) of RAM1 is similar to Figure 3.6-2
No
Yes
Option RAM board is RA1-(2 Mbyte) or RA1-3 (8 Mbyte)
No
Yes
Option RAM board is RA1-2 (4 Mbyte)
Waveform of pin 18 (RAS3) of RAM501 is similar to Figures 3.6-1, 2
No
Yes
Waveform of pins 34, 35 (CAS3) of RAM501 are similar to Figures 3.6-1, 2
No
Yes
Waveform of pin 33 (OE) of RAM501 is similar to Figure 3.6-1
No
Yes
Waveforms of pin 17 (WE) of RAM501 is similar to Figure 3.6-2
No
RA1-2 (4 Mbyte) is recognized as RA1- (2 Mbyte)
Yes
Option RAM board is not recognized
No
Yes
Replace E76 board
Replace RAM1
Replace RAM501

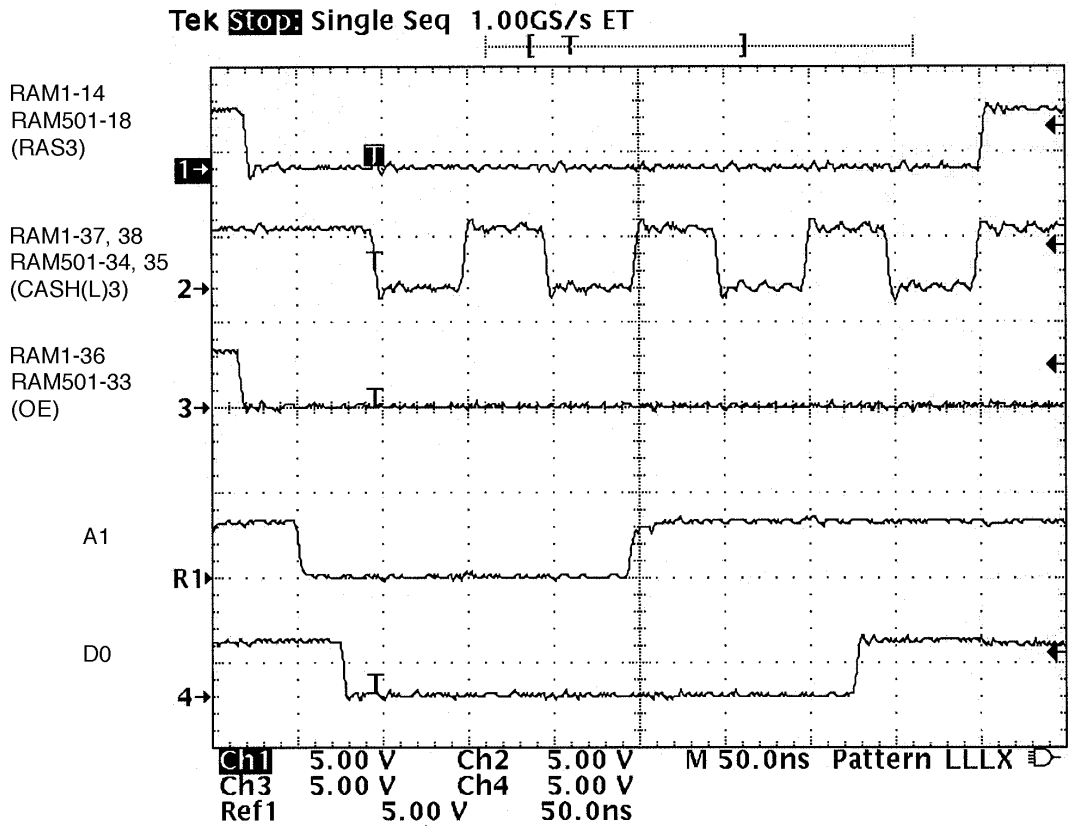


Fig. 3.6-1 RA1-1: DRAM

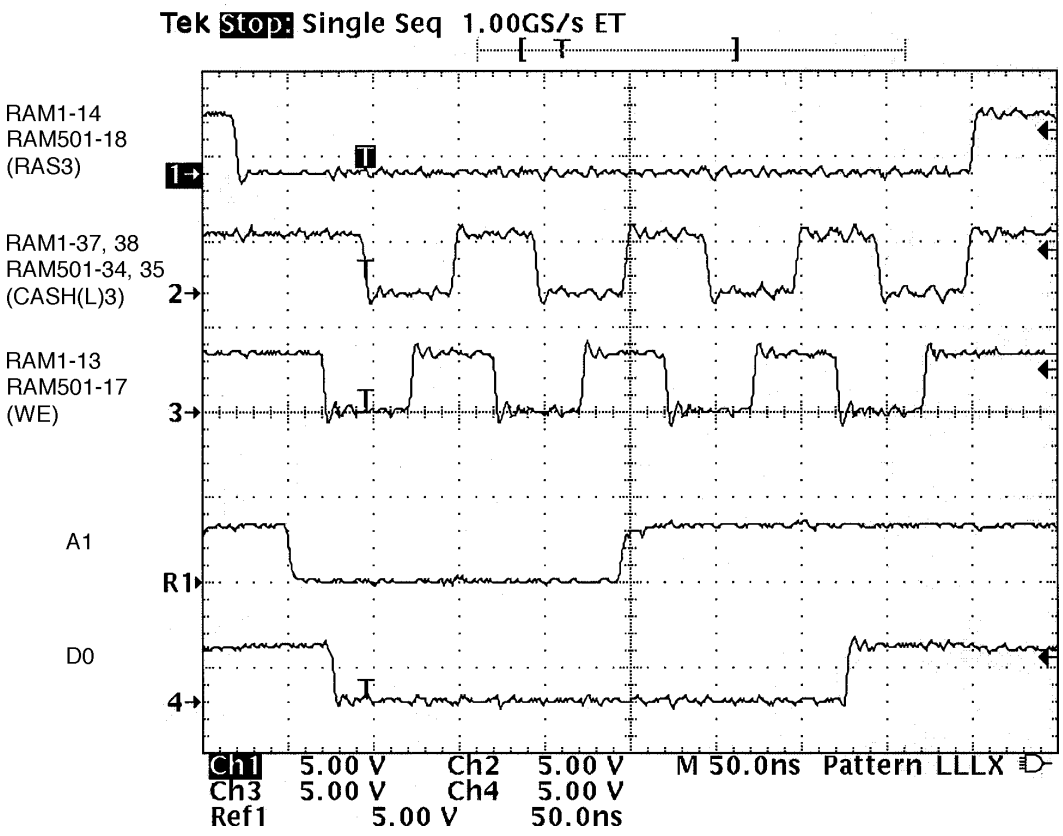
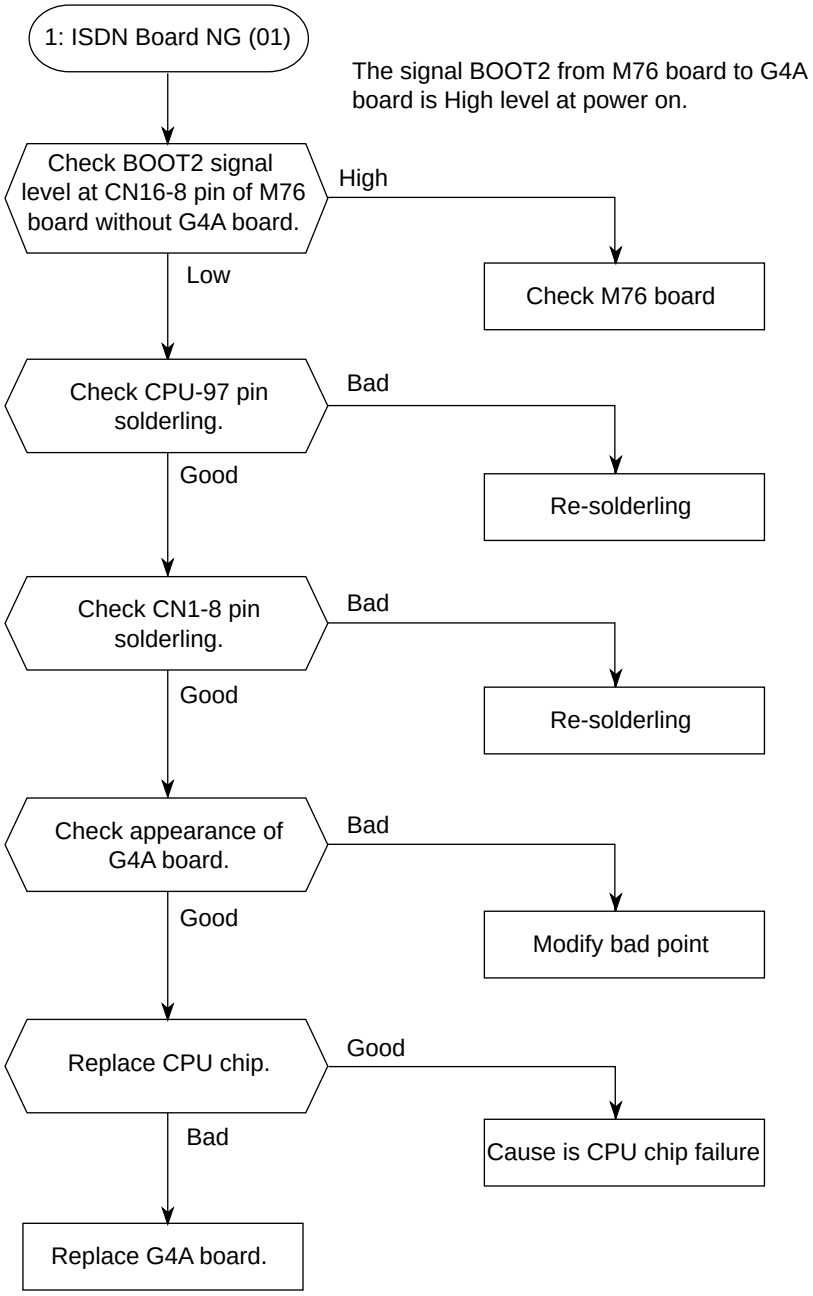


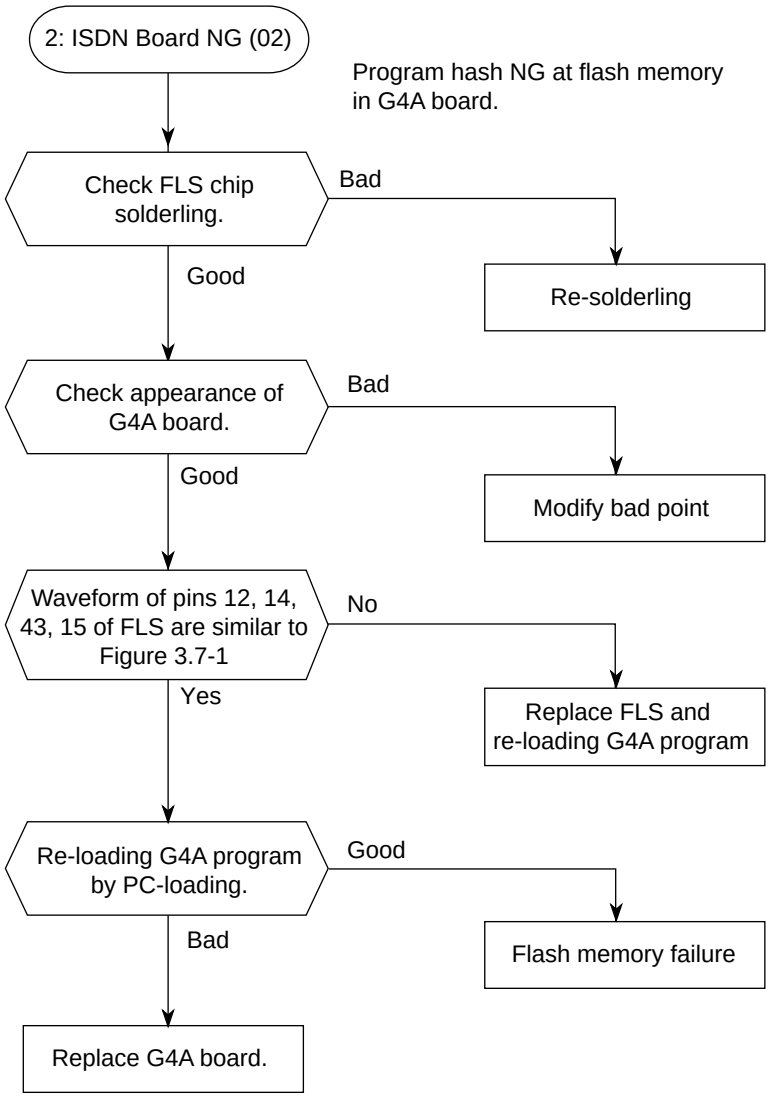
Fig. 3.6-2 RA1-2: DRAM Write

3.7 Option G4/ISDN I/F control board G4A

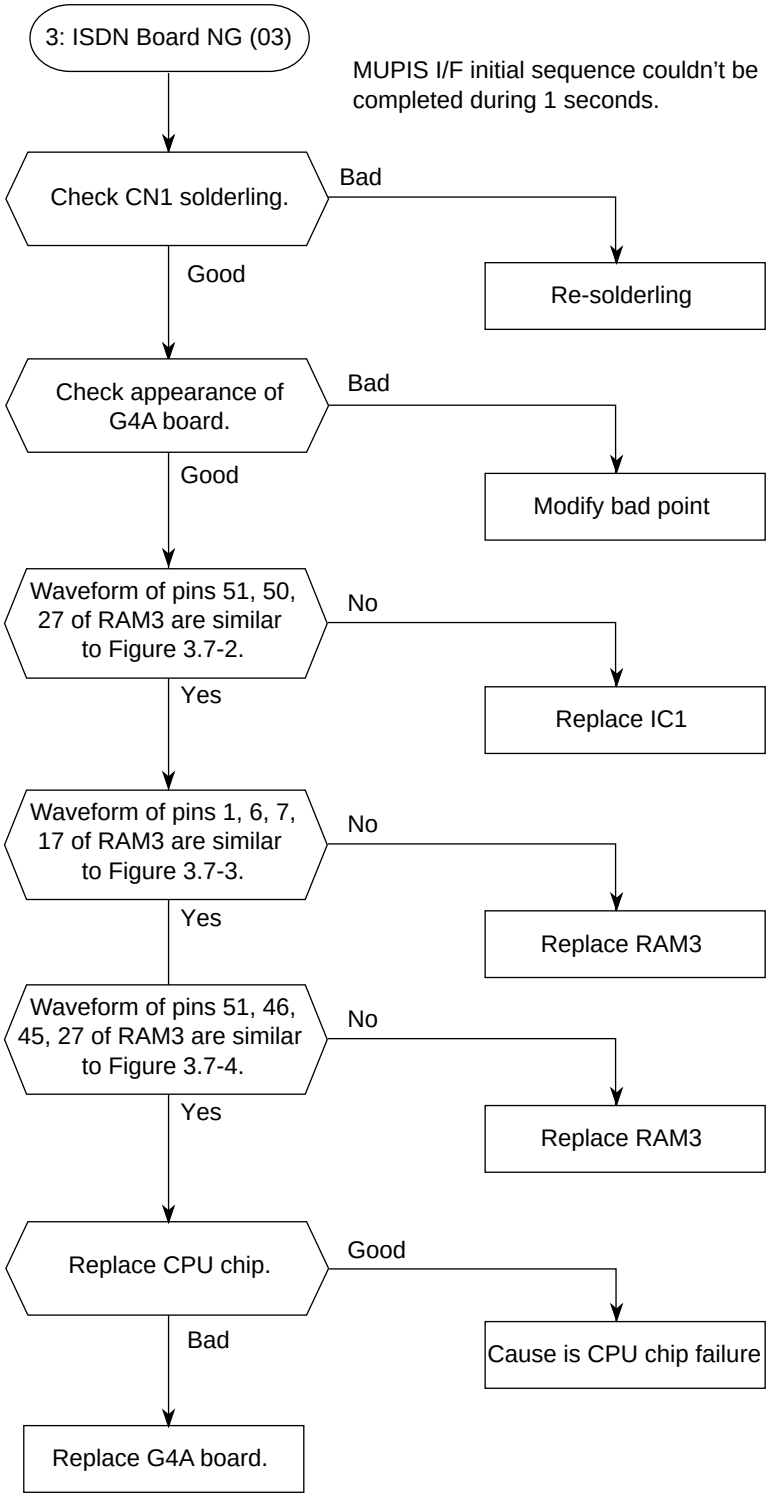
3.7.1 ISDN Board NG (01)



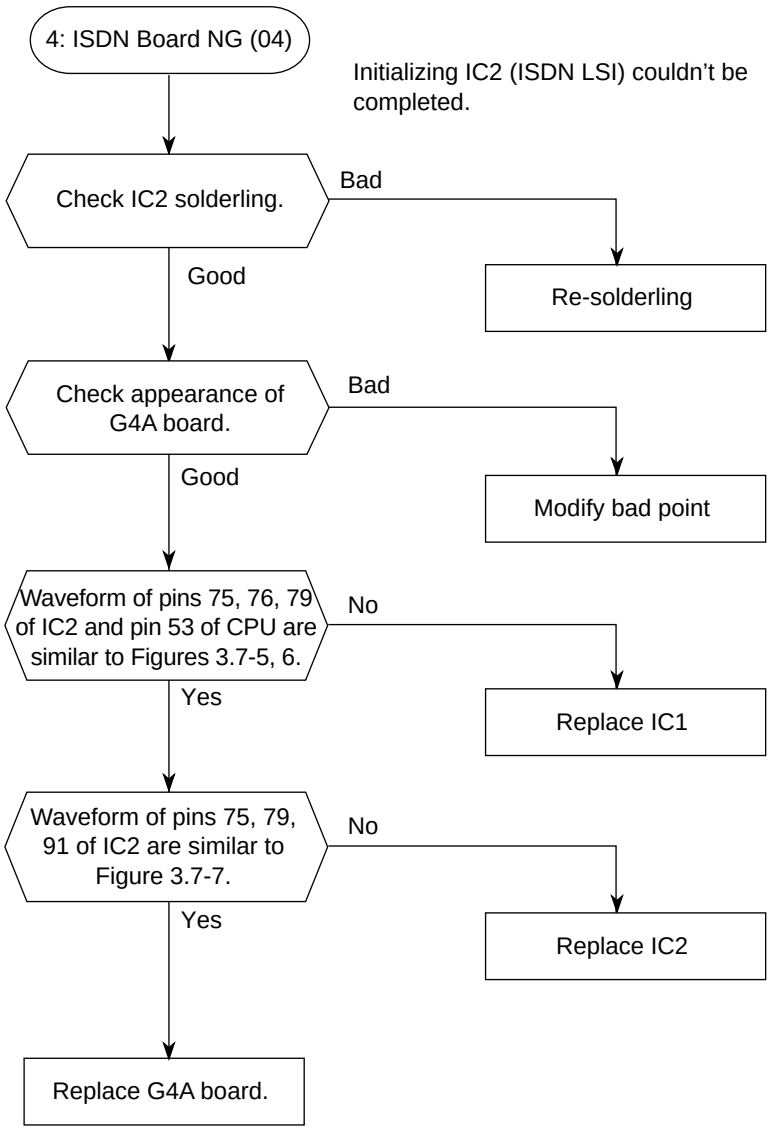
3.7.2 ISDN Board NG (02)



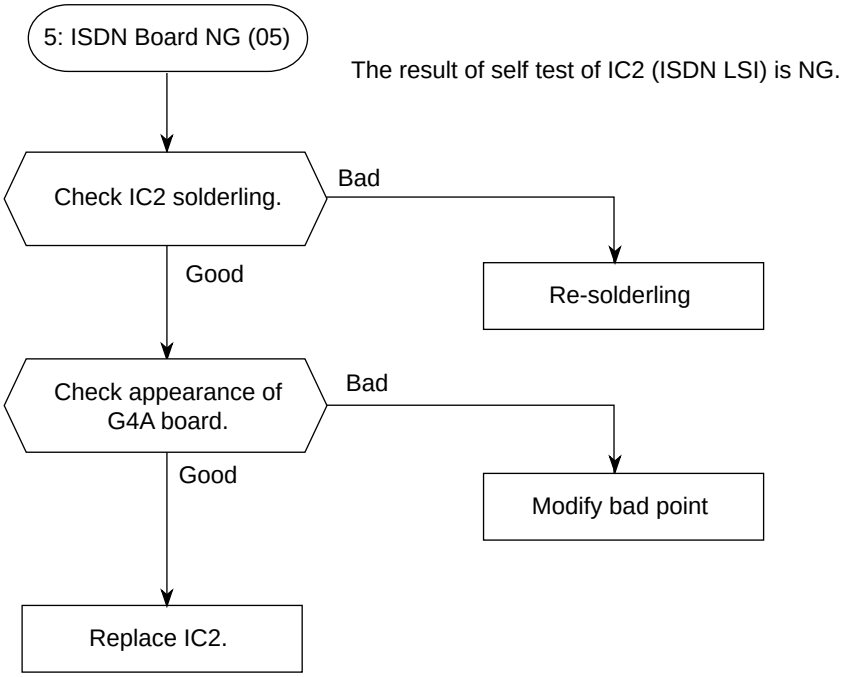
3.7.3 ISDN Board NG (03)



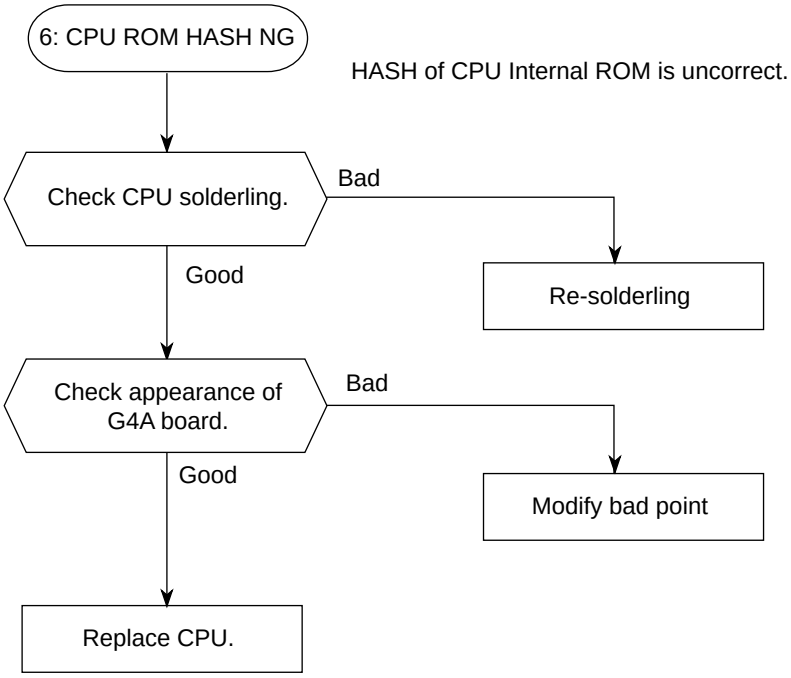
3.7.4 ISDN Board NG (04)



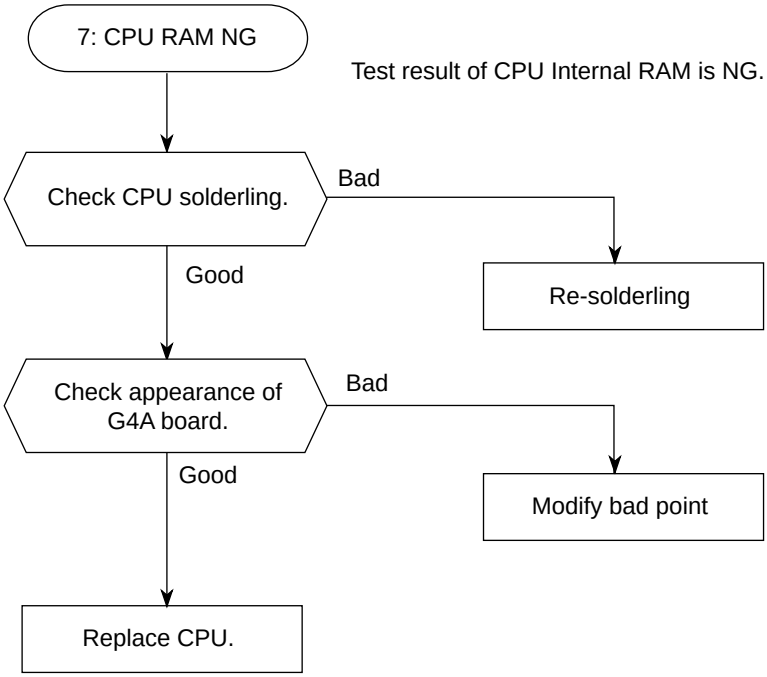
3.7.5 ISDN Board NG (05)



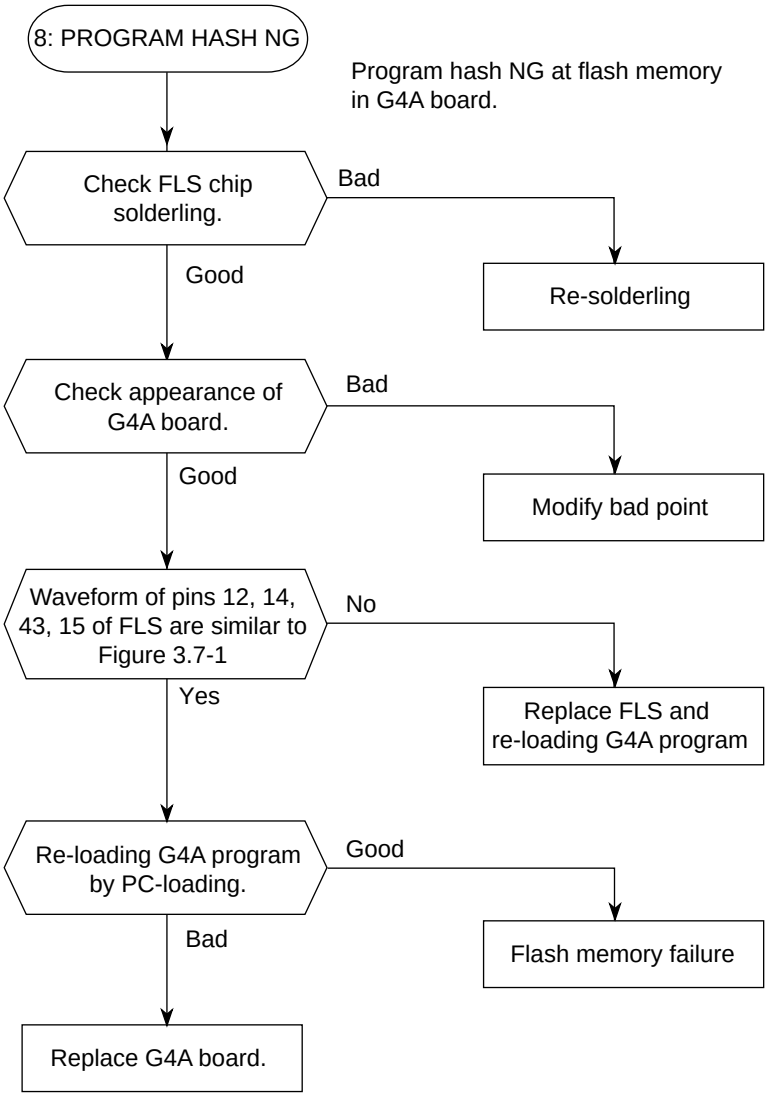
3.7.6 CPU ROM HASH NG



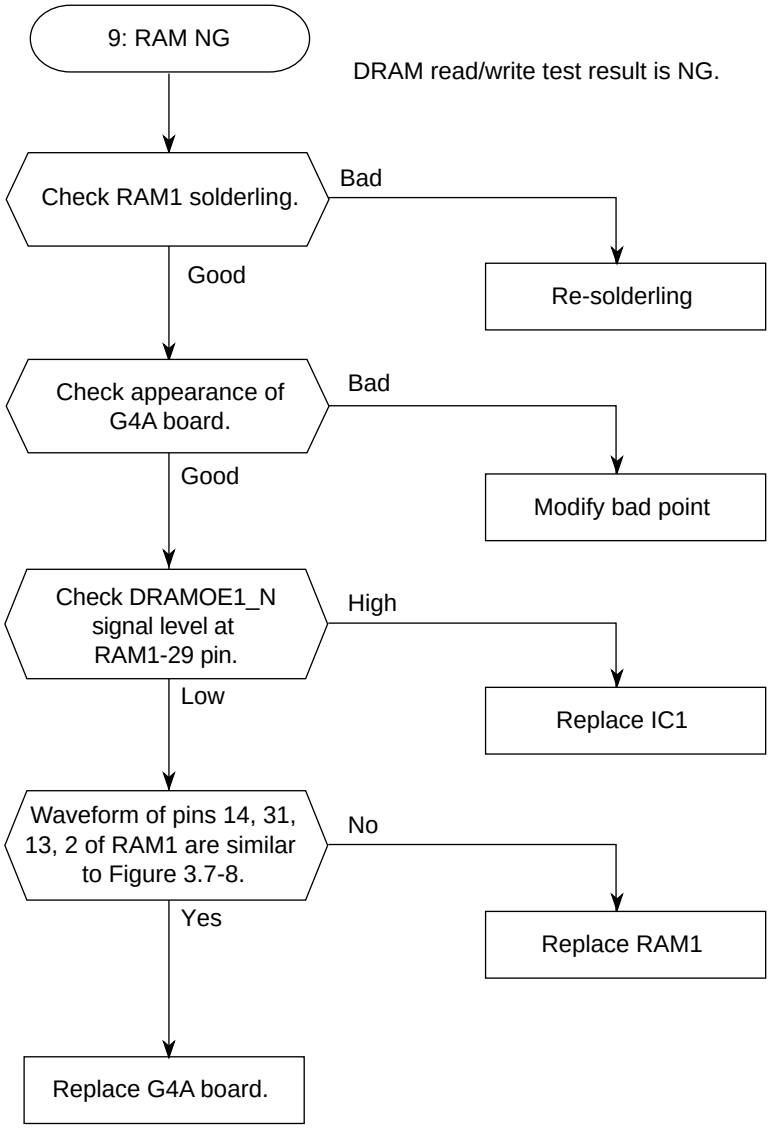
3.7.7 CPU RAM NG



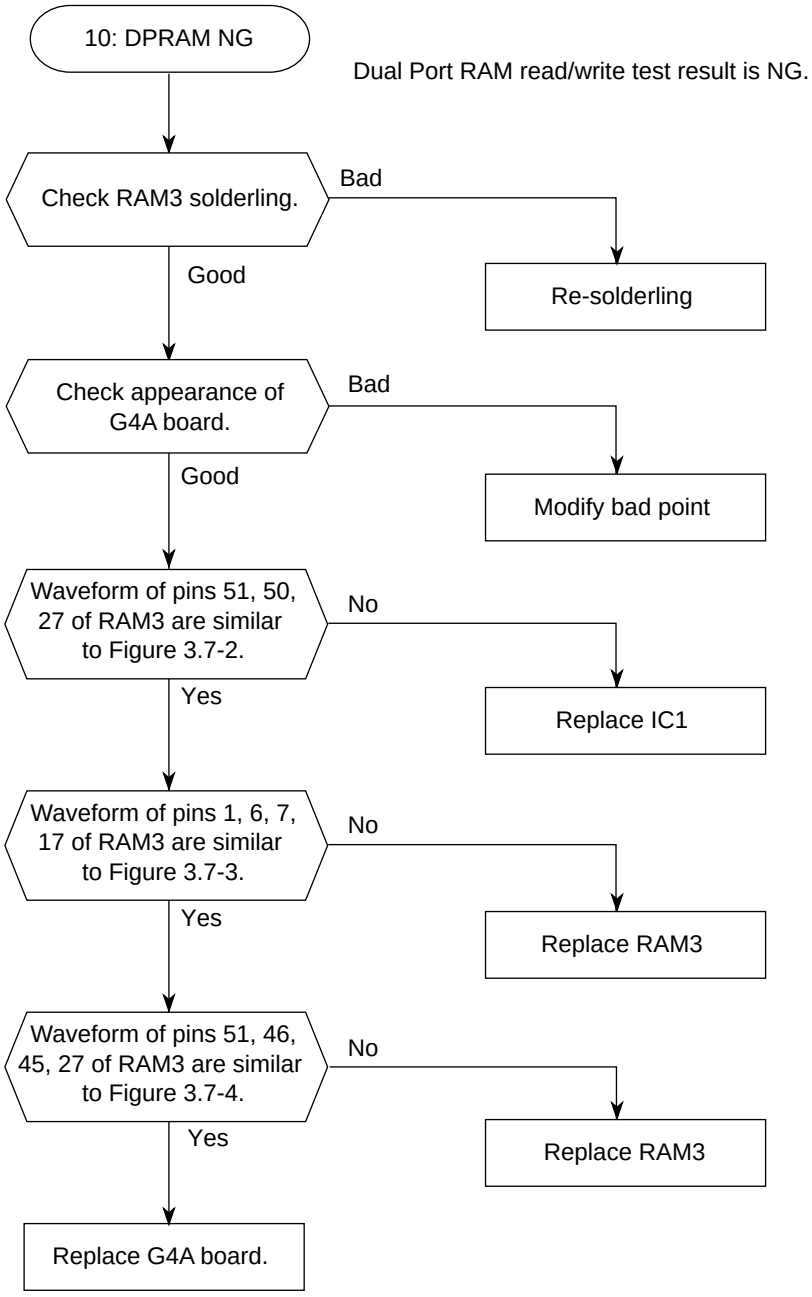
3.7.8 PROGRAM HASH NG



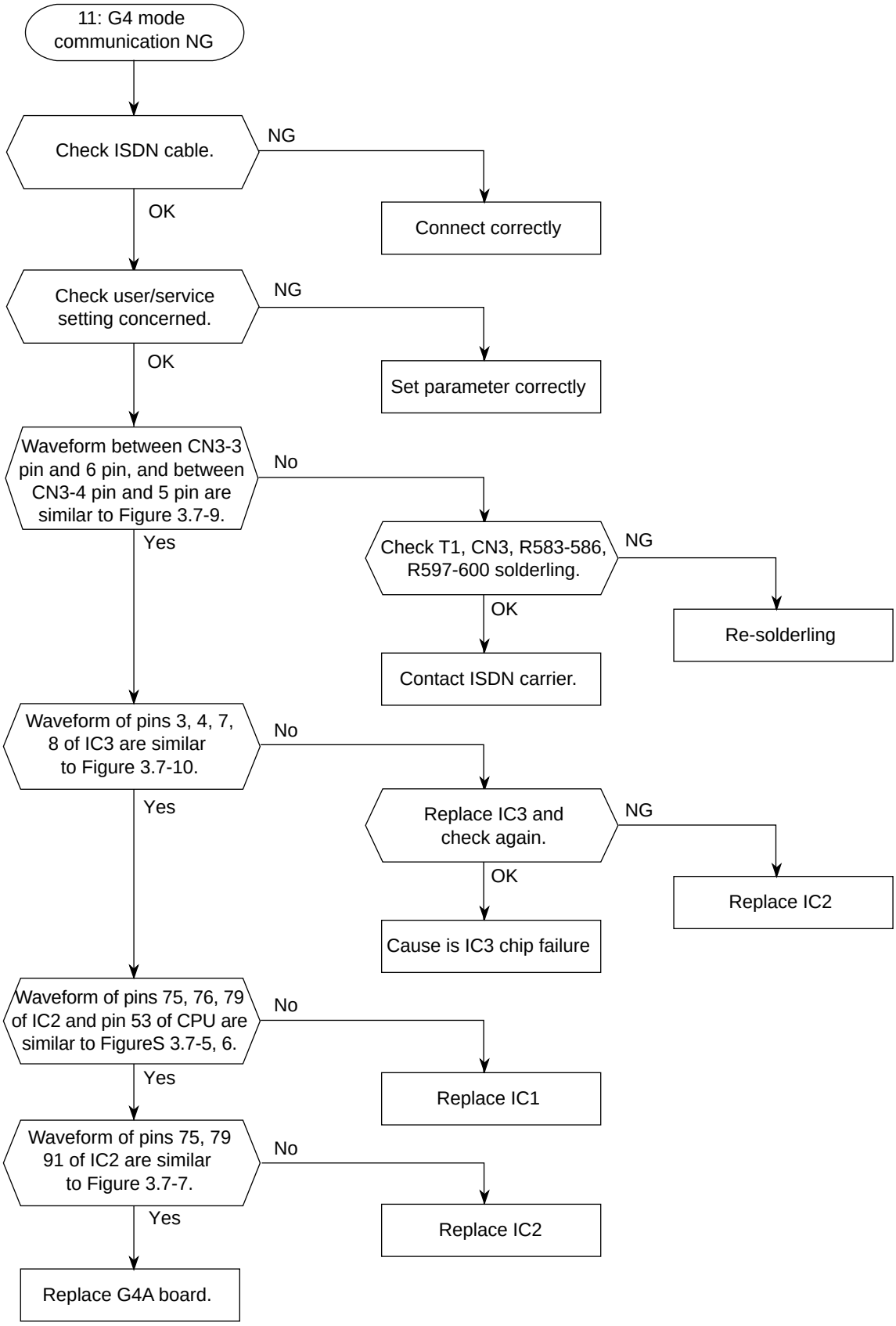
3.7.9 RAM NG


9: RAM NG
DRAM read/write test result is NG.
Check RAM1 solderling.
Bad
Re-solderling
Good
Check appearance of G4A board.
Bad
Modify bad point
Good
Check DRAMOE1_N signal level at RAM1-29 pin.
High
Replace IC1
Low
Waveform of pins 14, 31, 13, 2 of RAM1 are similar to Figure 3.7-8.
No
Replace RAM1
Yes
Replace G4A board.

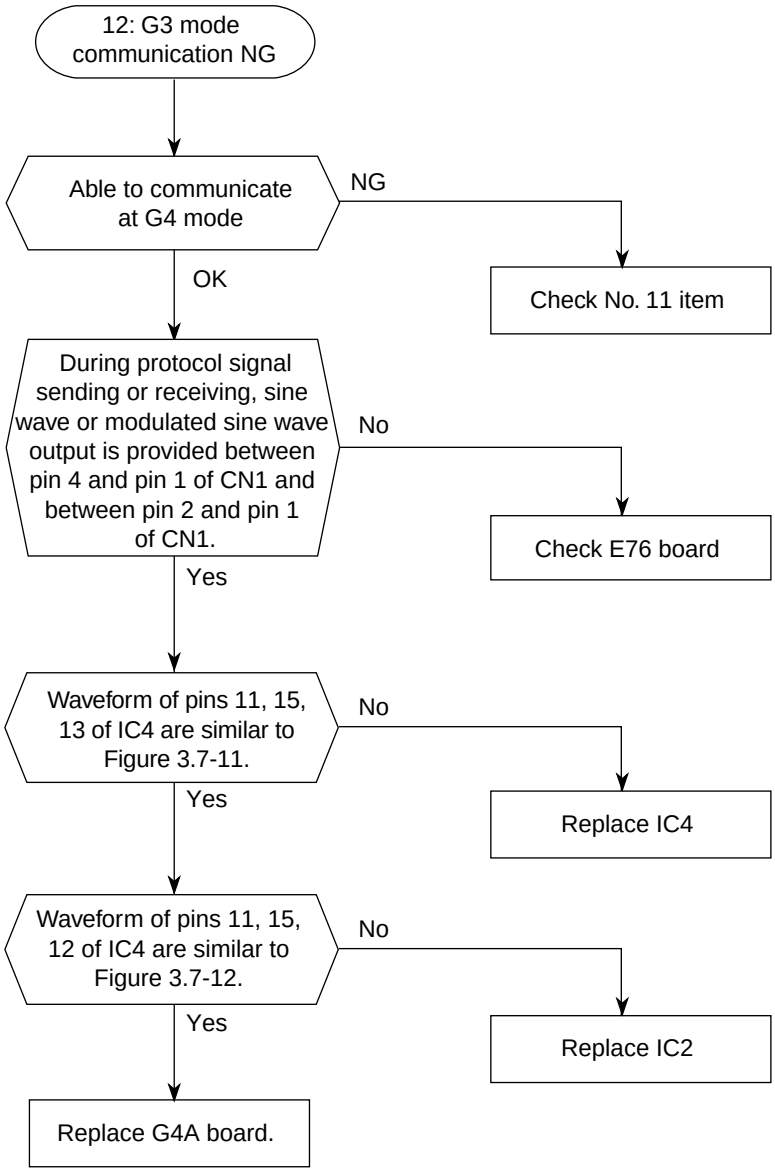
3.7.10 DPRAM NG



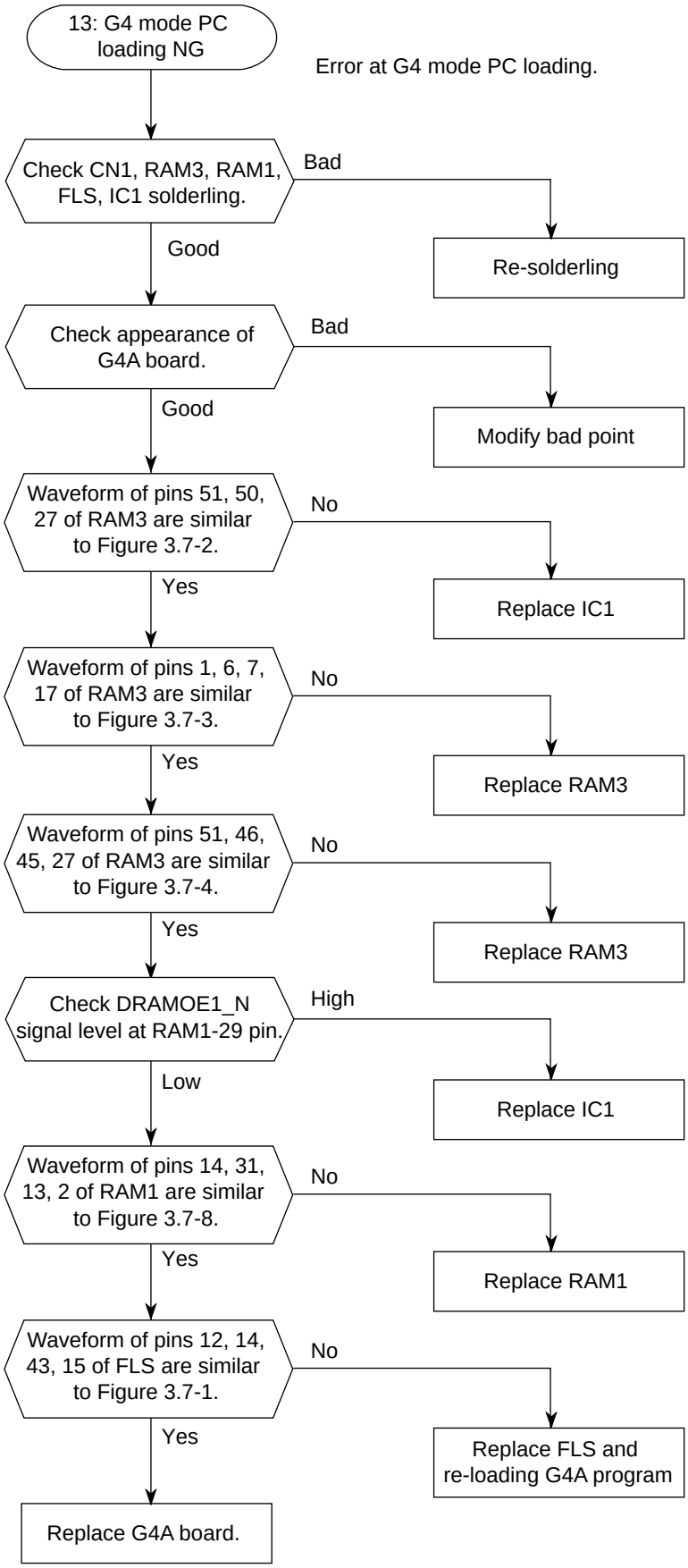
3.7.11 G4 mode communication NG



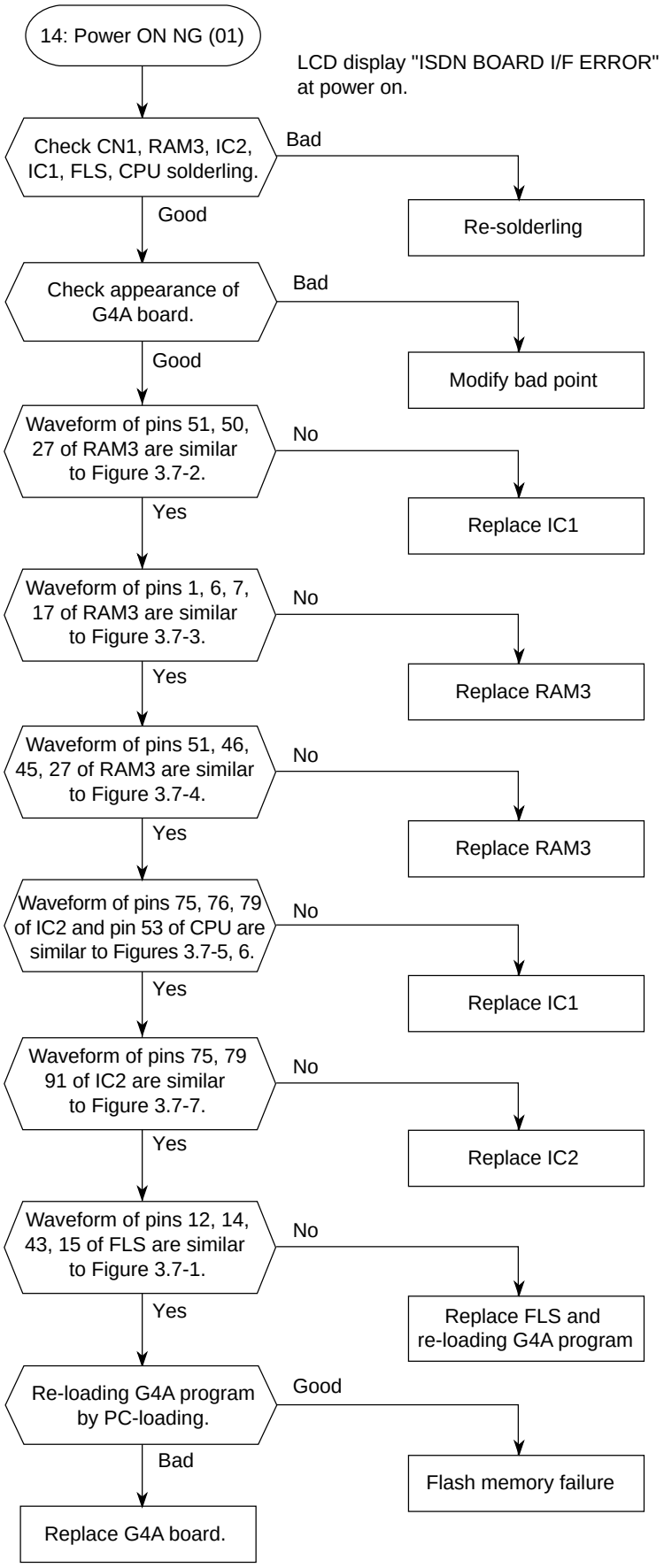
3.7.12 G3 mode communication NG


12: G3 mode communication NG
Able to communicate at G4 mode
NG
Check No. 11 item
OK
During protocol signal sending or receiving, sine wave or modulated sine wave output is provided between pin 4 and pin 1 of CN1 and between pin 2 and pin 1 of CN1.
No
Check E76 board
Yes
Waveform of pins 11, 15, 13 of IC4 are similar to Figure 3.7-11.
No
Replace IC4
Yes
Waveform of pins 11, 15, 12 of IC4 are similar to Figure 3.7-12.
No
Replace IC2
Yes
Replace G4A board.

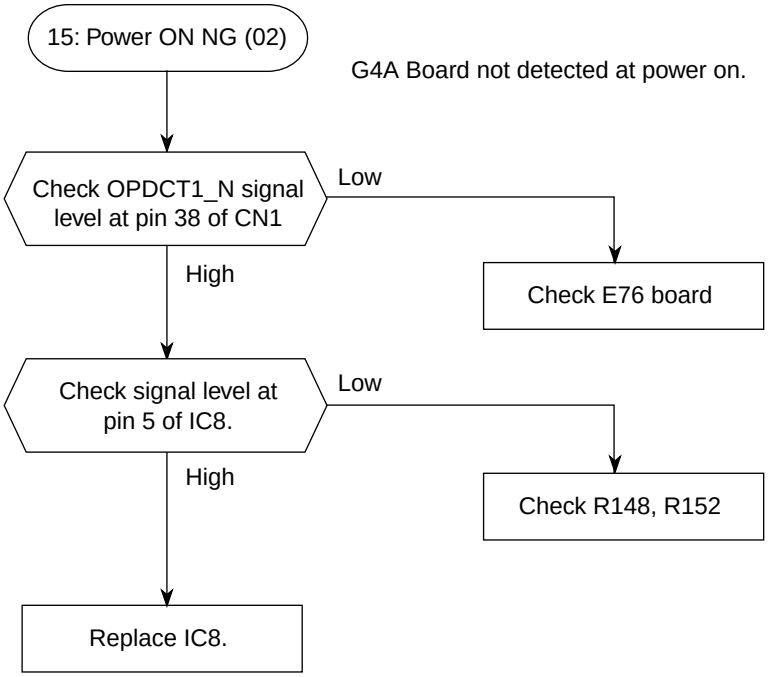
3.7.13 G4 mode PC loading NG


13: G4 mode PC loading NG
Error at G4 mode PC loading.
Check CN1, RAM3, RAM1, FLS, IC1 solderling.
Bad
Re-solderling
Good
Check appearance of G4A board.
Bad
Modify bad point
Good
Waveform of pins 51, 50, 27 of RAM3 are similar to Figure 3.7-2.
No
Replace IC1
Yes
Waveform of pins 1, 6, 7, 17 of RAM3 are similar to Figure 3.7-3.
No
Replace RAM3
Yes
Waveform of pins 51, 46, 45, 27 of RAM3 are similar to Figure 3.7-4.
No
Replace RAM3
Yes
Check DRAMOE1_N signal level at RAM1-29 pin.
High
Replace IC1
Low
Waveform of pins 14, 31, 13, 2 of RAM1 are similar to Figure 3.7-8.
No
Replace RAM1
Yes
Waveform of pins 12, 14, 43, 15 of FLS are similar to Figure 3.7-1.
No
Replace FLS and re-loading G4A program
Yes
Replace G4A board.

3.7.14 Power ON NG (01)


14: Power ON NG (01)
LCD display "ISDN BOARD I/F ERROR" at power on.
Check CN1, RAM3, IC2, IC1, FLS, CPU solderling.
Bad
Re-solderling
Good
Check appearance of G4A board.
Bad
Modify bad point
Good
Waveform of pins 51, 50, 27 of RAM3 are similar to Figure 3.7-2.
No
Replace IC1
Yes
Waveform of pins 1, 6, 7, 17 of RAM3 are similar to Figure 3.7-3.
No
Replace RAM3
Yes
Waveform of pins 51, 46, 45, 27 of RAM3 are similar to Figure 3.7-4.
No
Replace RAM3
Yes
Waveform of pins 75, 76, 79 of IC2 and pin 53 of CPU are similar to Figures 3.7-5, 6.
No
Replace IC1
Yes
Waveform of pins 75, 79 91 of IC2 are similar to Figure 3.7-7.
No
Replace IC2
Yes
Waveform of pins 12, 14, 43, 15 of FLS are similar to Figure 3.7-1.
No
Replace FLS and re-loading G4A program
Yes
Re-loading G4A program by PC-loading.
Good
Flash memory failure
Bad
Replace G4A board.

3.7.15 Power ON NG (02)



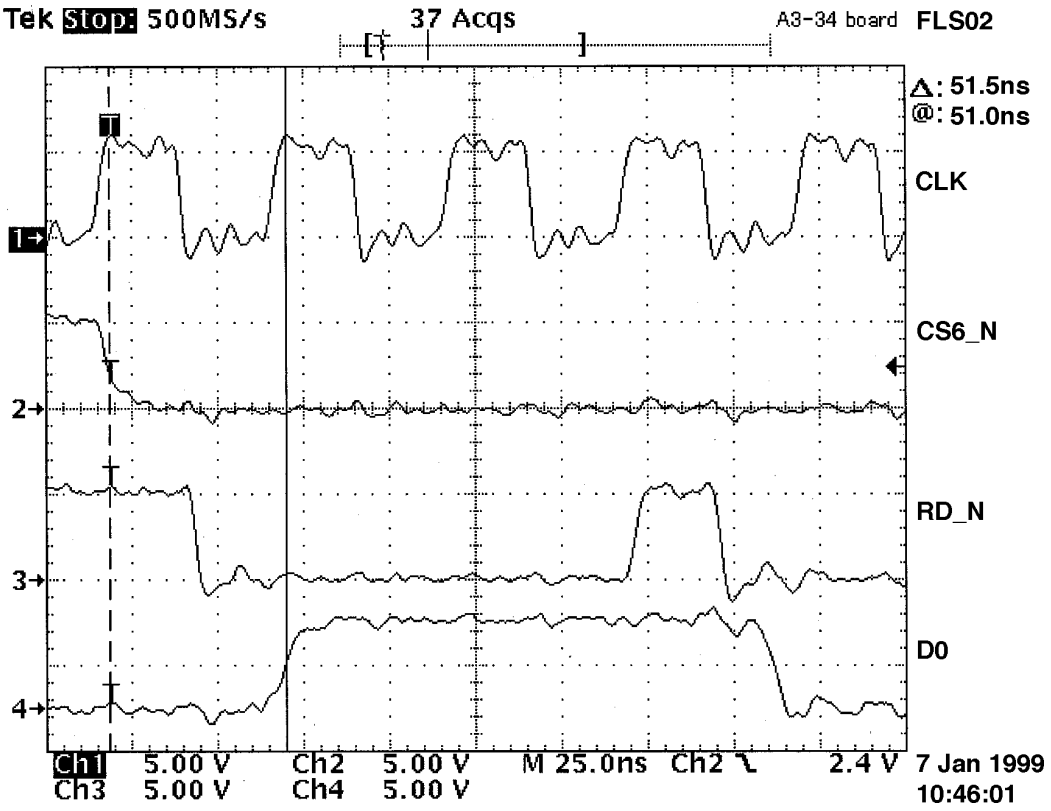


Fig. 3.7-1

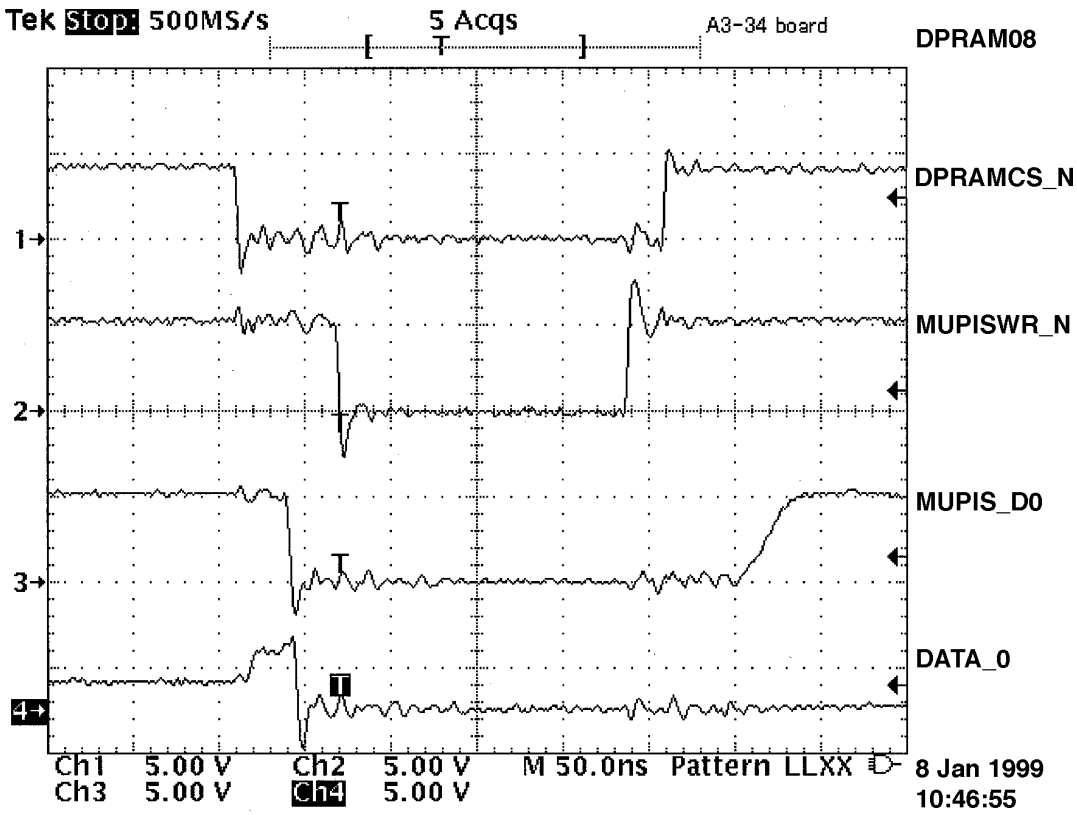
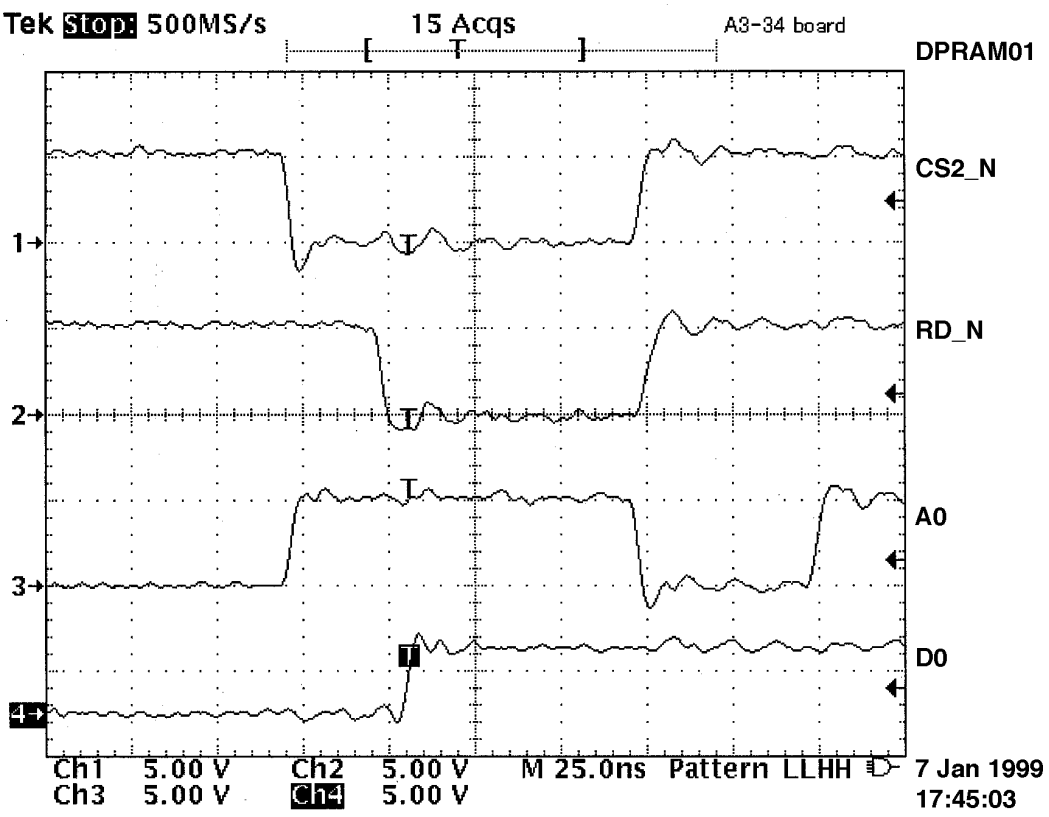
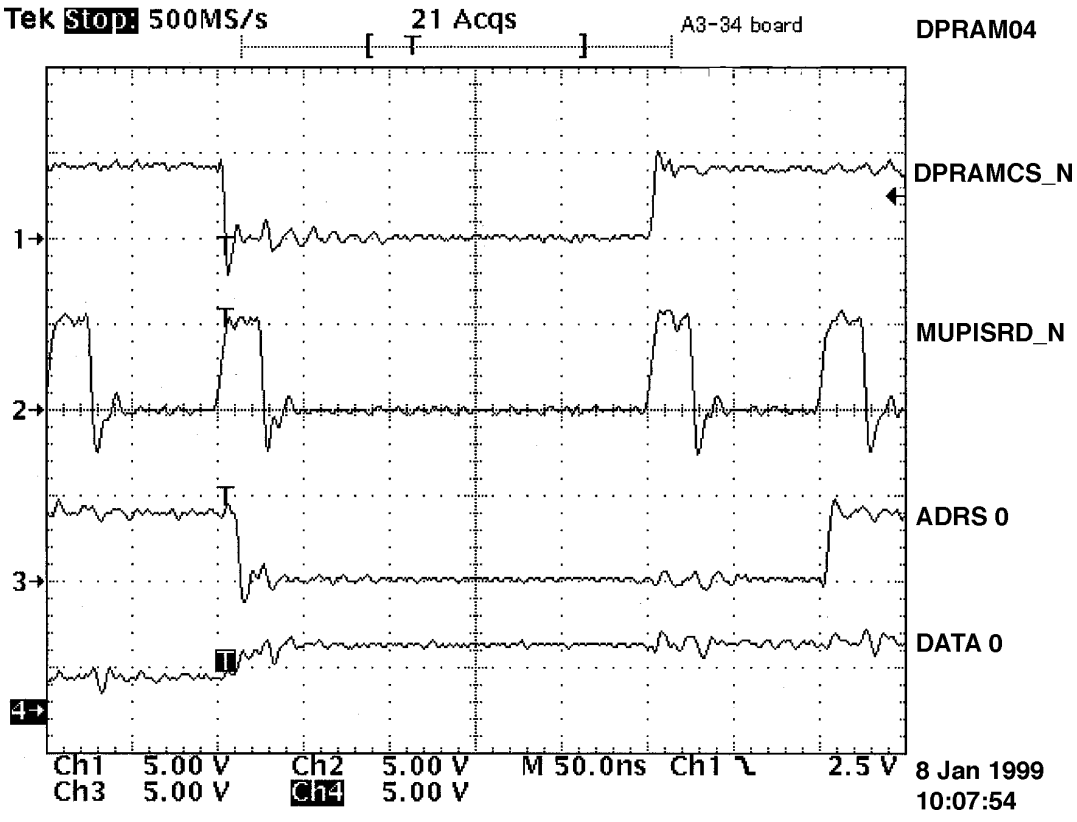


Fig. 3.7-2



Fgi. 3.7-3



Fgi. 3.7-4

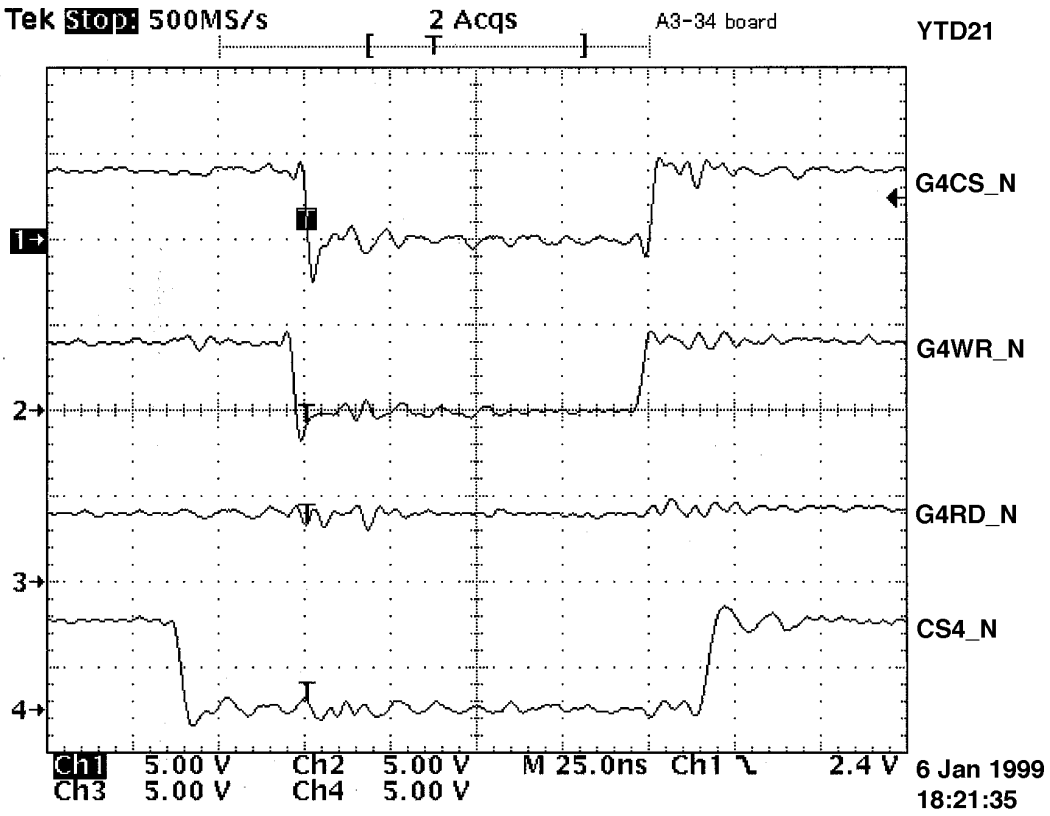


Fig. 3.7-5

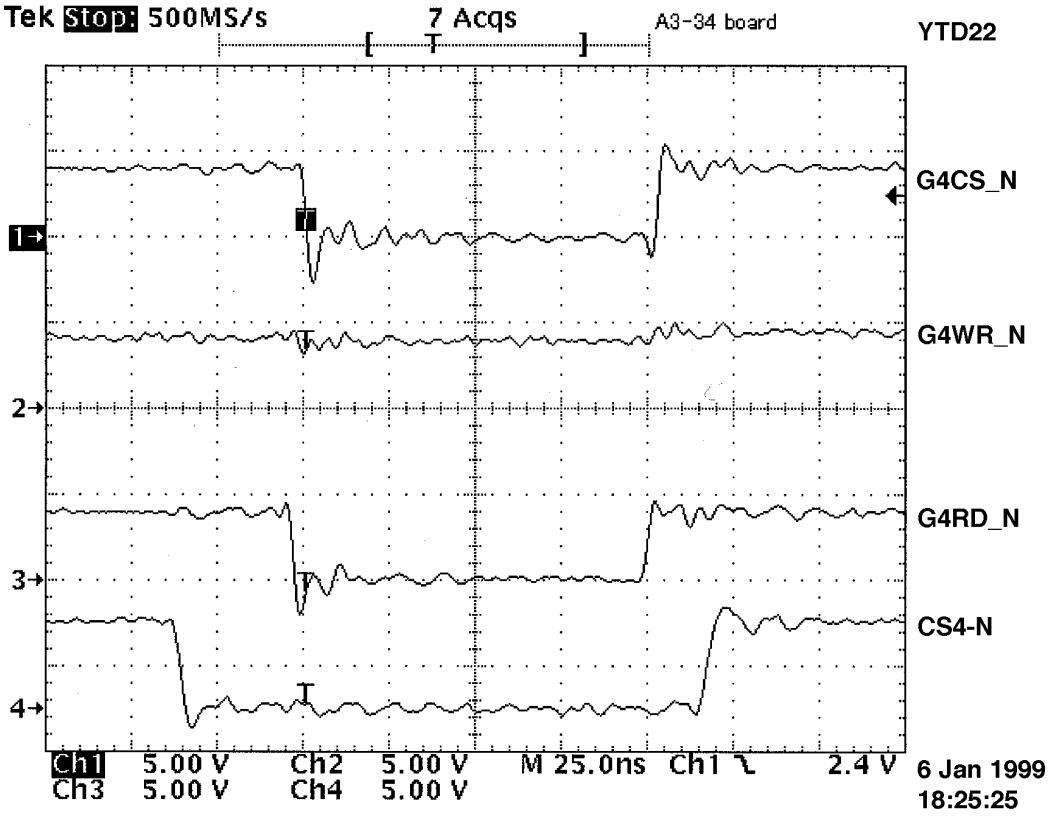


Fig. 3.7-6

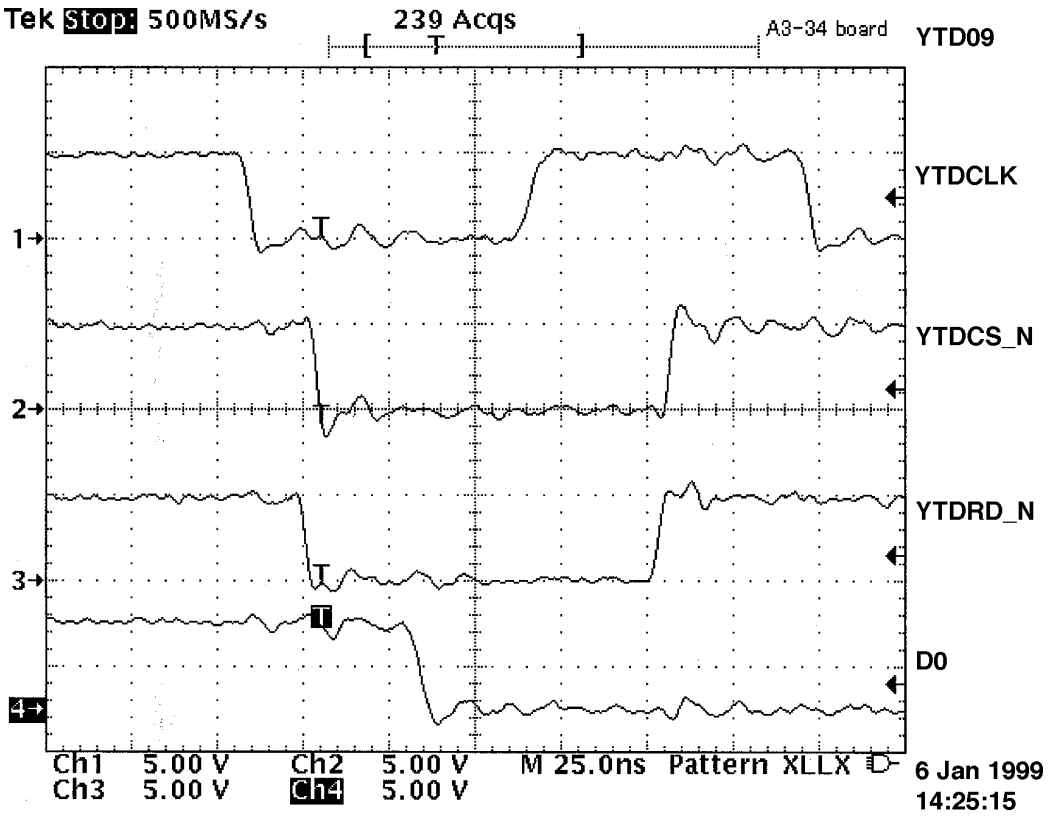


Fig. 3.7-7

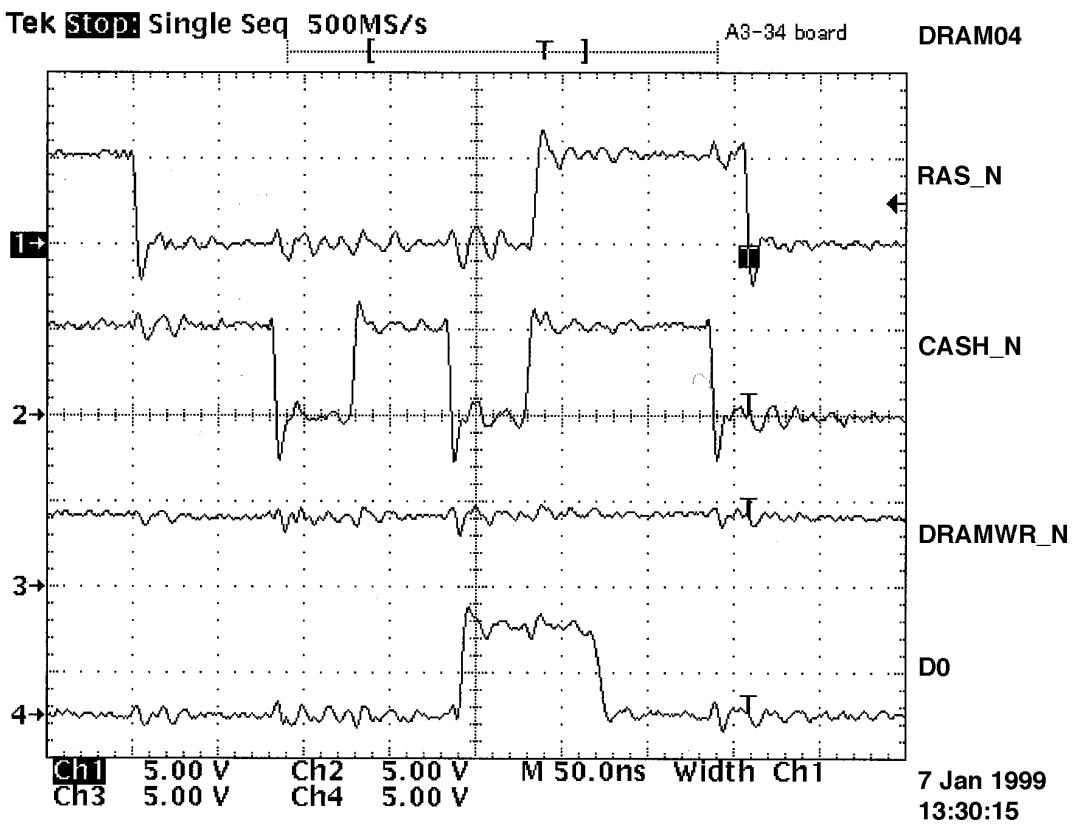


Fig. 3.7-8

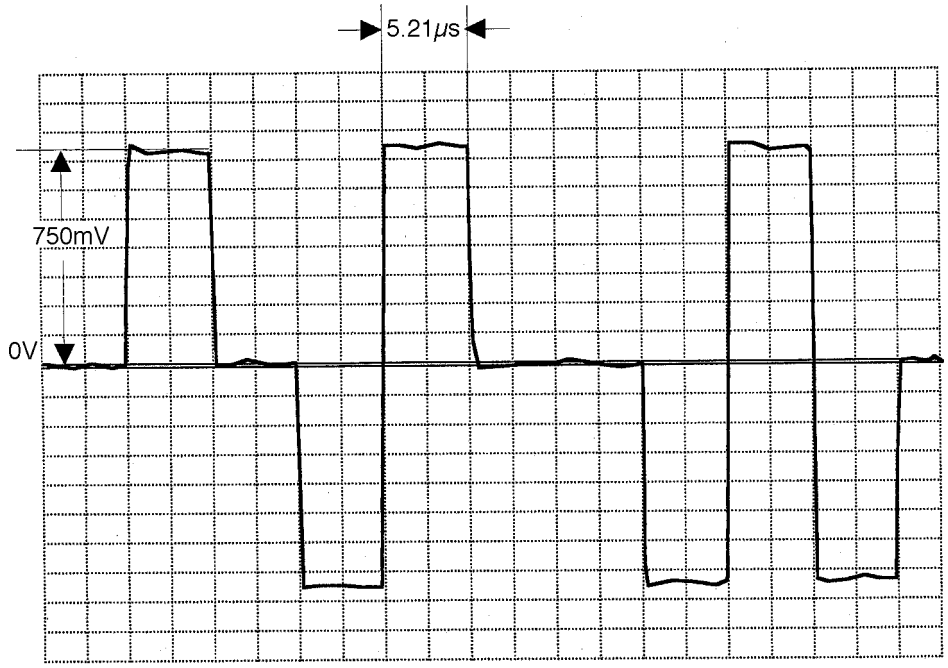


Fig. 3.7-9

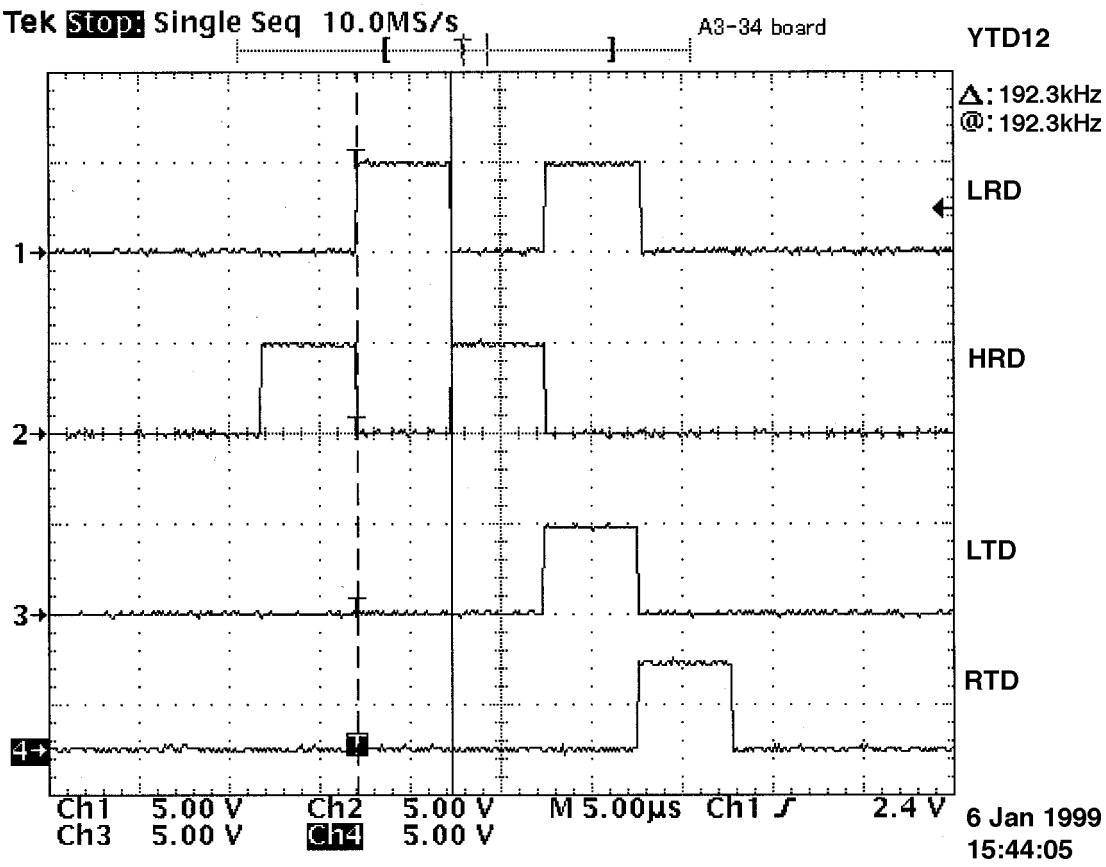


Fig. 3.7-10

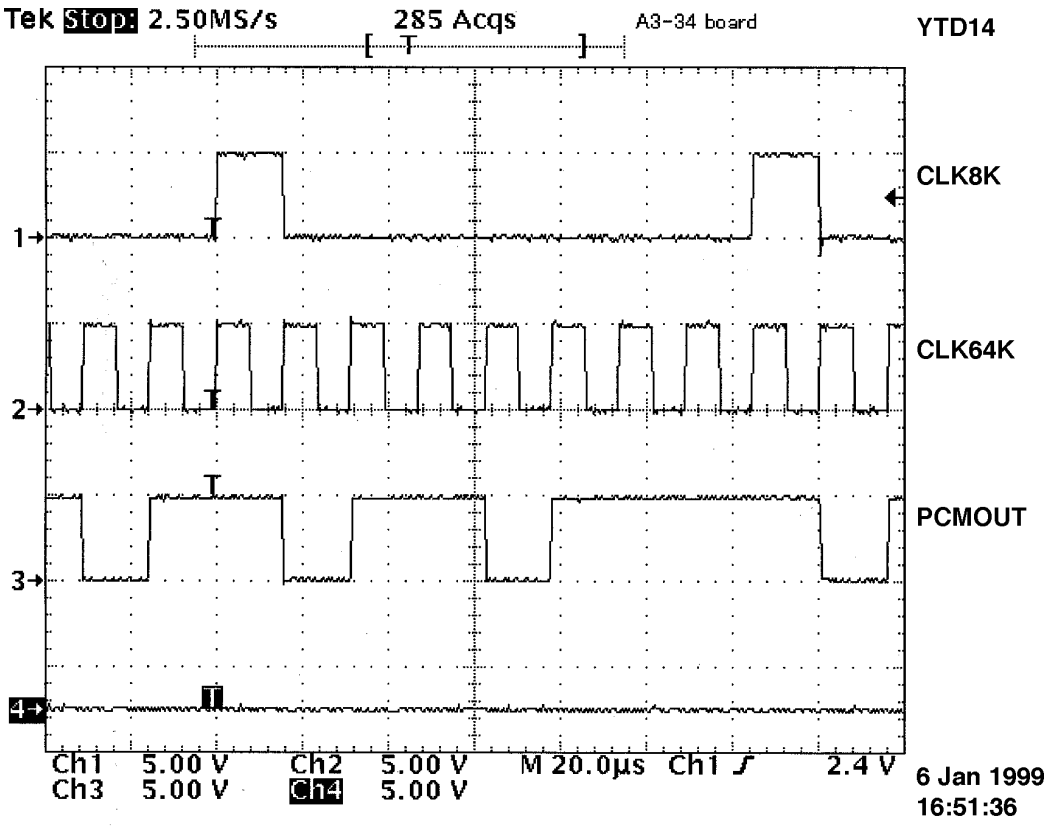


Fig. 3.7-11

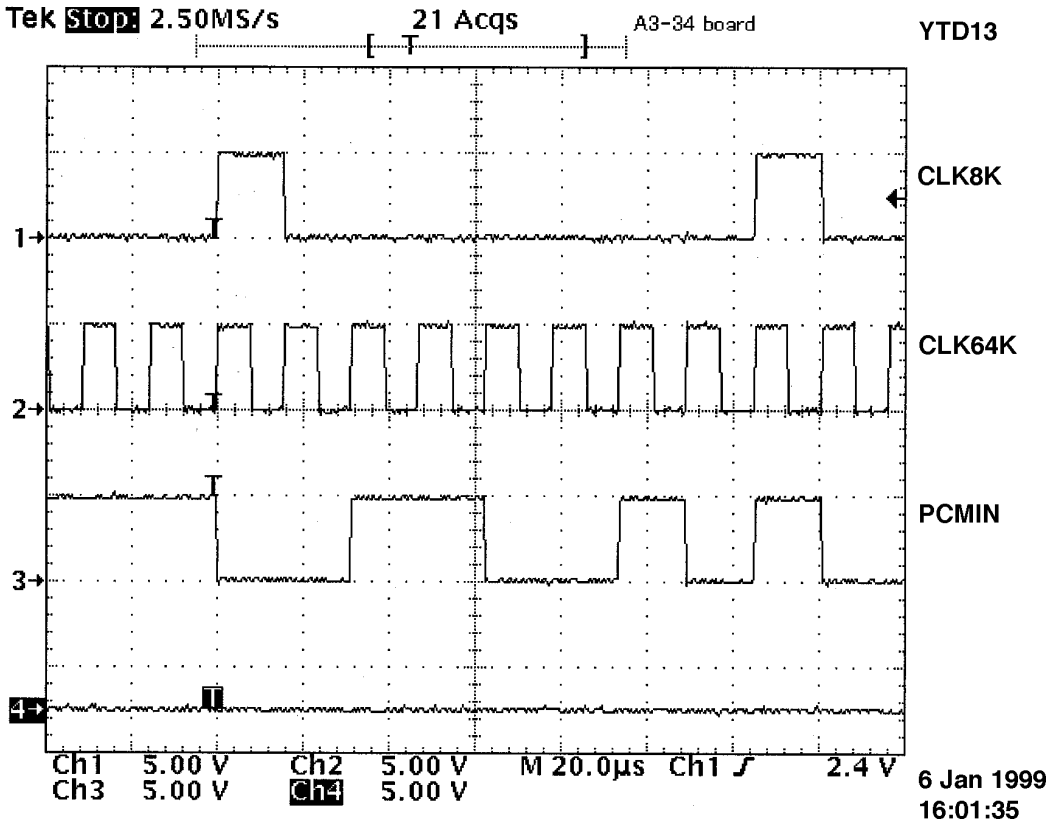
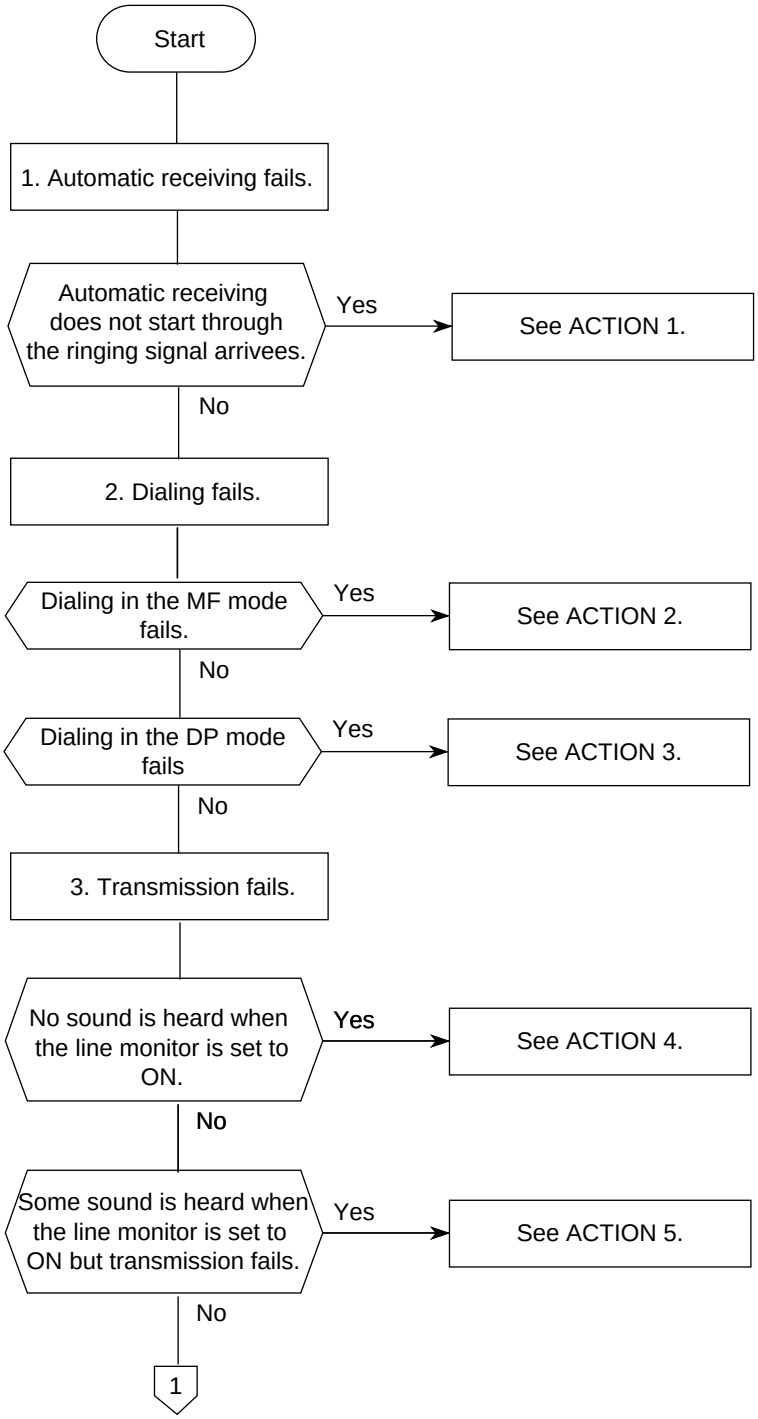


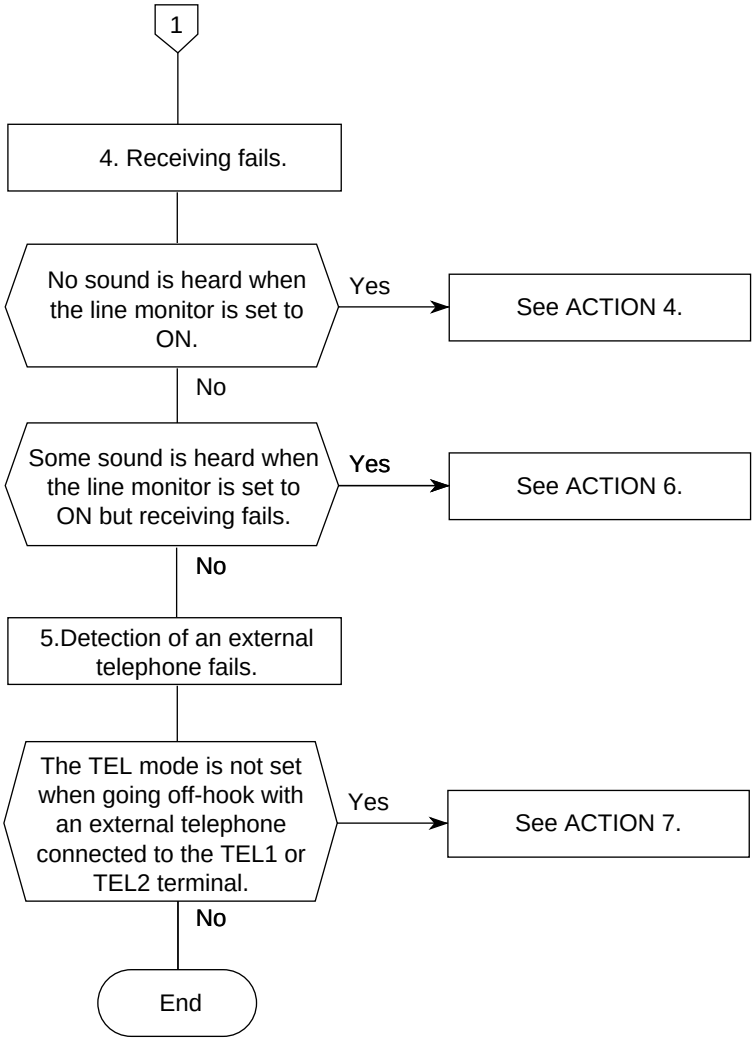
Fig. 3.7-12

3.8 Network control board UNC/WN5/TB0

NCU (UNC/WN5/TB0) Troubleshooting

UNC: US/Canada
WN5: International
TB0: EC countries




1
4. Receiving fails.
No sound is heard when the line monitor is set to ON.
Yes
See ACTION 4.
No
Some sound is heard when the line monitor is set to ON but receiving fails.
Yes
See ACTION 6.
No
5.Detection of an external telephone fails.
The TEL mode is not set when going off-hook with an external telephone connected to the TEL1 or TEL2 terminal.
Yes
See ACTION 7.
No
End

UNC: ACTION Item:

No.	ACTION	
1	Probable cause 1: Check item 1:	No incoming signal at RI-N. Check the CN3-4 pin with an oscillosope (when the ringing signal arrives at the line). If a signal exists at RI-N, a part other than this board may be faulty. If no signal is detected, go to the next probable cause.
	Probable cause 2: Check item 2:	IC1 defect. Replace IC1.
2	Probable cause 1: Check item 1:	RL6 defect. Replace RL6.
	Probable cause 2: Check item 2:	RL1 defect. (When both transmission and receiving fail.) Replace RL1.
	Probable cause 3: Check item 3:	RL3 defect. (When both transmission and receiving fail.) Replace RL3.
	Probable cause 4: Check item 4:	T1 defect. (When both transmission and receiving fail.) Replace T1.
3	Probable cause 1: Check item 1:	RL1 defect. (When both transmission and receiving fail.) Replace RL1.
	Probable cause 2: Check item 2:	RL3 defect. (When both transmission and receiving fail.) Replace RL3.
4	Probable cause 1: Check item 1:	RL1 defect. (When both transmission and receiving fail.) Replace RL1.
	Probable cause 1: Check item 1:	T1 defect. (When both transmission and receiving fail.) Replace T1.
5	Probable cause 1: Check item 1:	RL6 defect. Replace RL6.
6	Probable cause 1: Check item 1:	A trouble with other than this board. Check other than this board.
7	Probable cause 1: Check item 1:	OH2-N signal failure. Check CN3-2 pin with an oscillosope. Normal if 0V upon going off-hook at the externally connected telephone. If other than 0V, go to the next probable vause.
	Probable cause 2: Check item 2:	IC2 defect. Replace IC2.

WN5: ACTION Item:

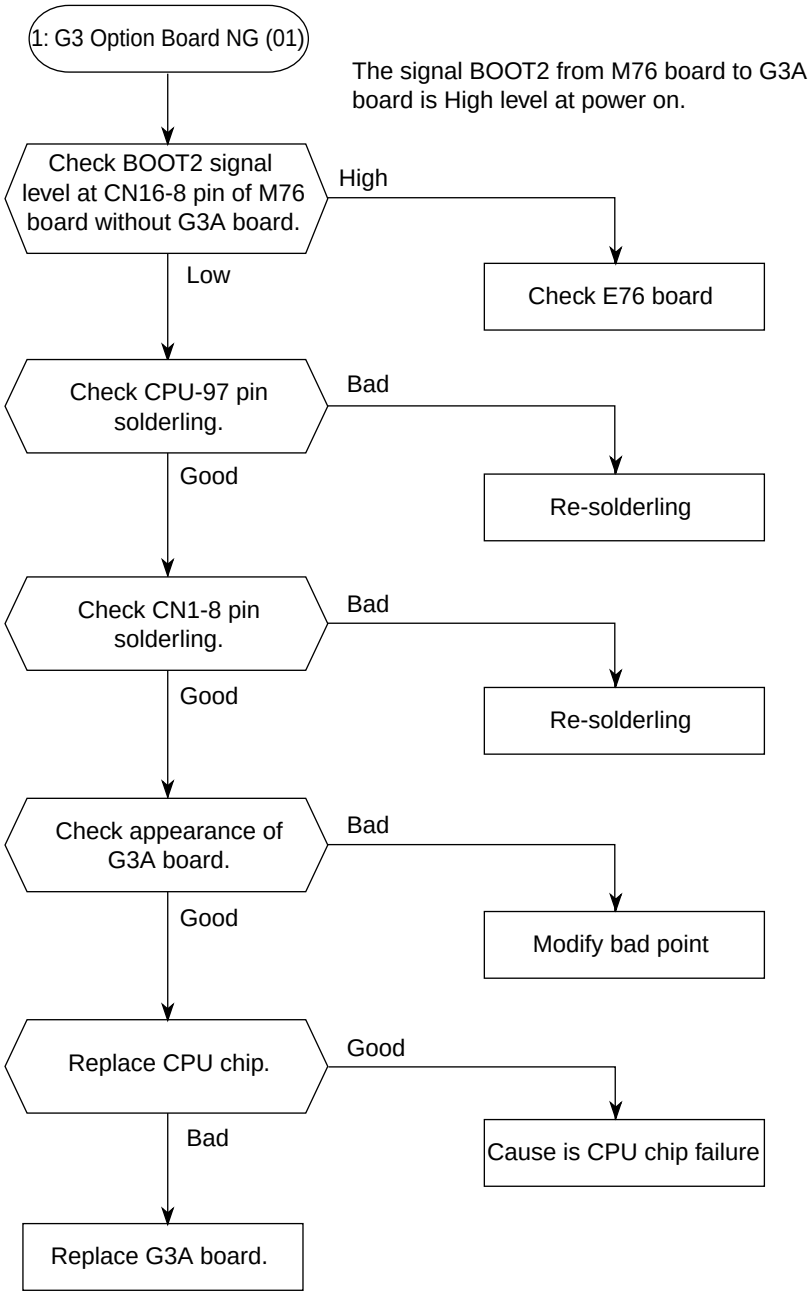
No.	ACTION	
1	Probable cause 1: Check item 1: Probable cause 2: Check item 2: Probable cause 3: Check item 3:	No incoming signal at RI-N. Check the CN3-4 pin with an oscillosope (when the ringing signal arrives at the line). If a signal exists at RI-N, a part other than this board may be faulty. If no signal is detected, go to the next probable cause. Incorrect DIPSW setting. Check the setting of DIPSW S1. IC1 defect. Replace IC1.
2	Probable cause 1: Check item 1: Probable cause 2: Check item 2: Probable cause 3: Check item 3: Probable cause 4: Check item 4: Probable cause 5: Check item 5:	No connector is inserted to either of CN15, CN25, CN35 and CN45. Correct connection according to the DIPSW setting table. DC loop not formed at the time of DTMF dialing. Check if a DC loop is formed at the time of DTMF call origination. If not, either of the following parts may be defective. Replace them one by one. IC5, Q3, DB1, IC10, RL1 RL6 defect. Replace RL6. RL3 defect. (When both transmission and receiving fail.) Replace RL3. T1 defect. (When both transmission and receiving fail.) Replace T1.
3	Probable cause 1: Check item 1:	DC loop not formed at the time of DP dialing. Check if a DC loop is formed at the time of DP dialing. If not, either of the following parts may be defective. Replace them one by one. IC5, Q3, DB1, IC10, RL1
4	Probable cause 1: Check item 1: Probable cause 2: Check item 2: Probable cause 3: Check item 3:	No connector is inserted to either of CN15, CN25, CN35 and CN45. Correct connection according to the DIPSW setting table. DC loop not formed. Check if a DC loop is formed. If not, either of the following parts may be defective. Replace them one by one. IC5, Q3, DB1, IC10, RL1 T1 defect. (When both transmission and receiving fail.) Replace T1.
5	Probable cause 1: Check item 1:	RL6 defect. Replace RL6.
6	Probable cause 1: Check item 1:	A trouble with other than this board. Check other than this board.
7	Probable cause 1: Check item 1: Probable cause 2: Check item 2:	OH2-N signal failure. Check CN3-2 pin with an oscillosope. Normal if 0V upon going off-hook at the externally connected telephone. If other than 0V, go to the next probable vause. IC2 or RL7 defect. Replace IC2 or RL7.

TB0: ACTION Item:

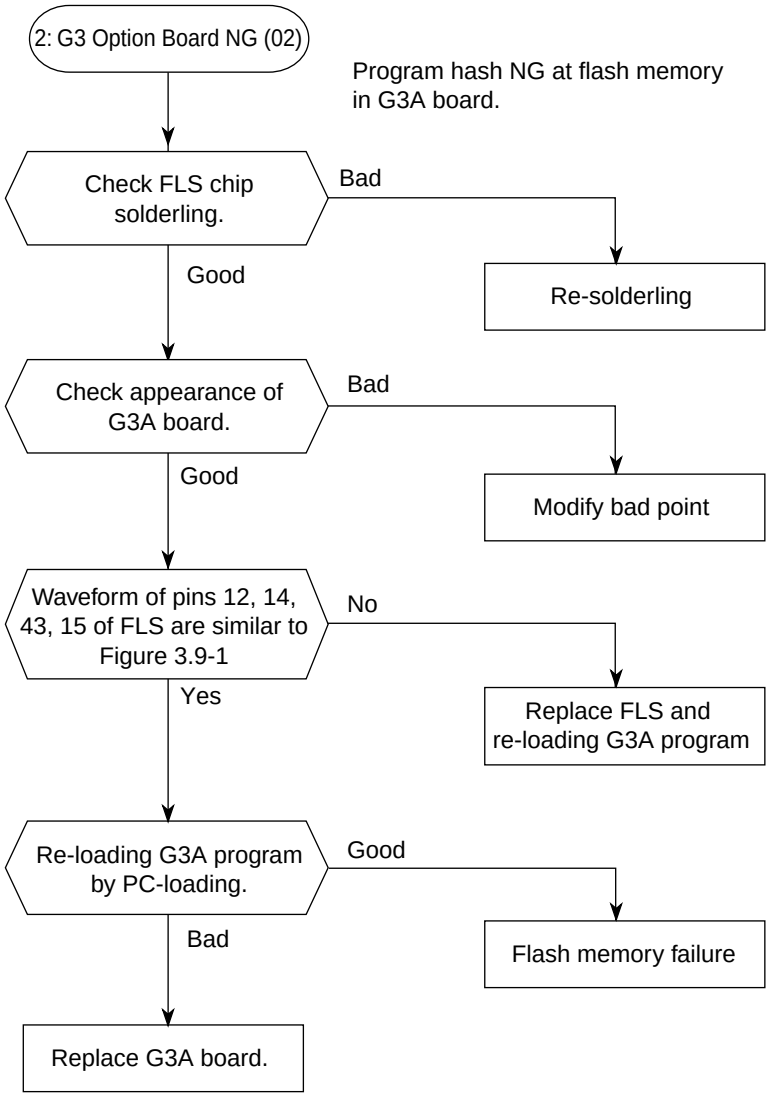
No.	ACTION	
1	Probable cause 1: Check item 1: Probable cause 2: Check item 2:	No incoming signal at RI-N. Check the CN3-4 pin with an oscillosope (when the ringing signal arrives at the line). If a signal exists at RI-N, a part other than this board may be faulty. If no signal is detected, go to the next probable cause. IC1 defect. Replace IC1.
2	Probable cause 1: Check item 1: Probable cause 2: Check item 2: Probable cause 3: Check item 3: Probable cause 4: Check item 4:	DC loop not formed at the time of DTMF dialing. Check if a DC loop is formed at the time of DTMF call origination. If not, either of the following parts may be defective. Replace them one by one. IC2, IC3, Q1, Q502, Q503, DB1, IC606, IC607, RL1 RL6 defect. Replace RL6. RL3 defect. (When both transmission and receiving fail.) Replace RL3. T1 defect. (When both transmission and receiving fail.) Replace T1.
3	Probable cause 1: Check item 1:	DC loop not formed at the time of DP dialing. Check if a DC loop is formed at the time of DP dialing. If not, either of the following parts may be defective. Replace them one by one. IC2, IC3, Q1, Q502, Q503, DB1, IC606, EC607, RL1
4	Probable cause 1: Check item 1: Probable cause 2: Check item 2:	DC loop not formed. Check if a DC loop is formed. If not, either of the following parts may be defective. Replace them one by one. IC2, IC3, Q1, Q502, Q503, DB1, IC606, EC607, RL1 T1 defect. (When both transmission and receiving fail.) Replace T1.
5	Probable cause 1: Check item 1:	RL6 defect. Replace RL6.
6	Probable cause 1: Check item 1:	A trouble with other than this board. Check other than this board.
7	Probable cause 1: Check item 1: Probable cause 2: Check item 2:	OH2-N signal failure. Check CN3-2 pin with an oscillosope. Normal if 0V upon going off-hook at the externally connected telephone. If other than 0V, go to the next probable vause. IC8 defect. Replace IC8.

3.9 Option G3 I/F control board G3A

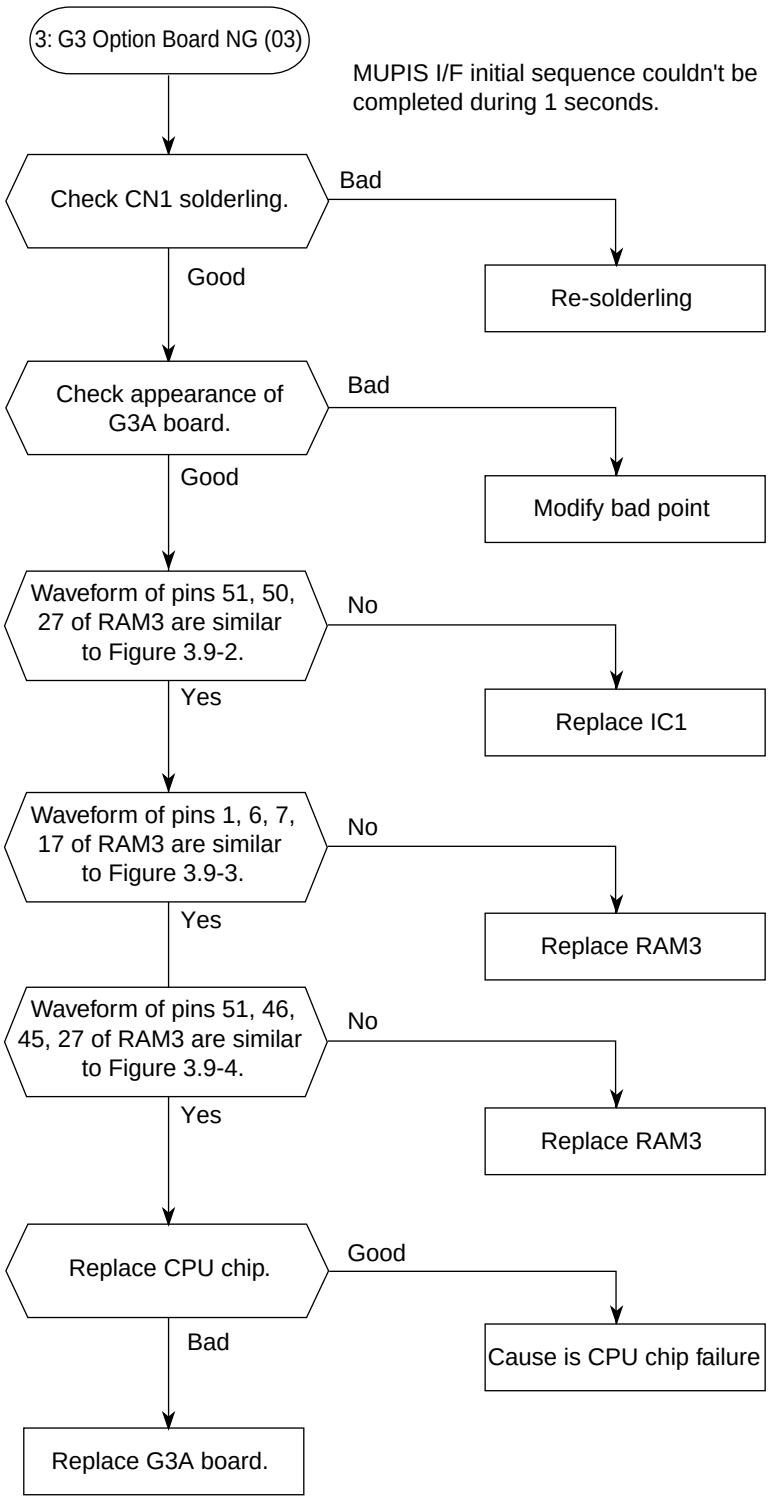
3.9.1 G3 Option Board NG (01)



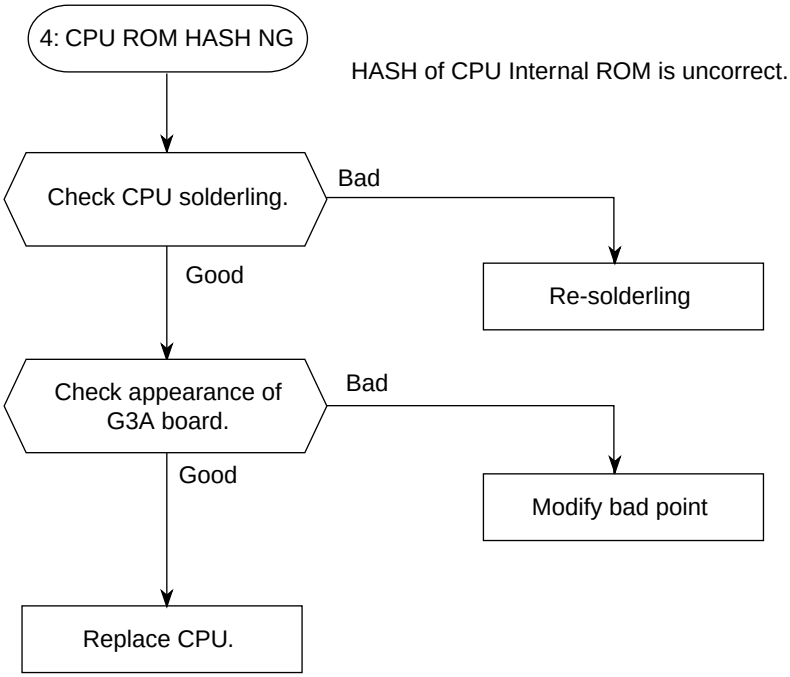
3.9.2 G3 Option Board NG (02)



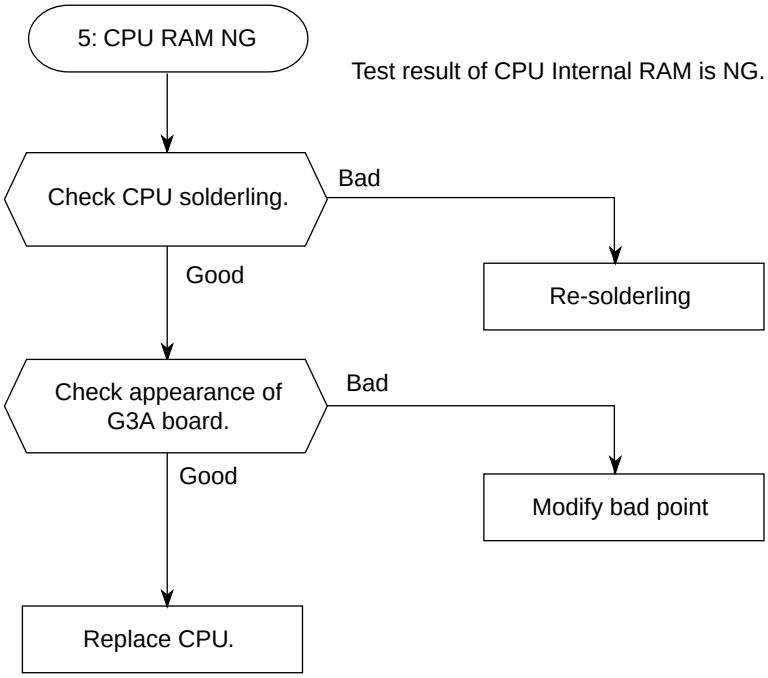
3.9.3 G3 Option Board NG (03)



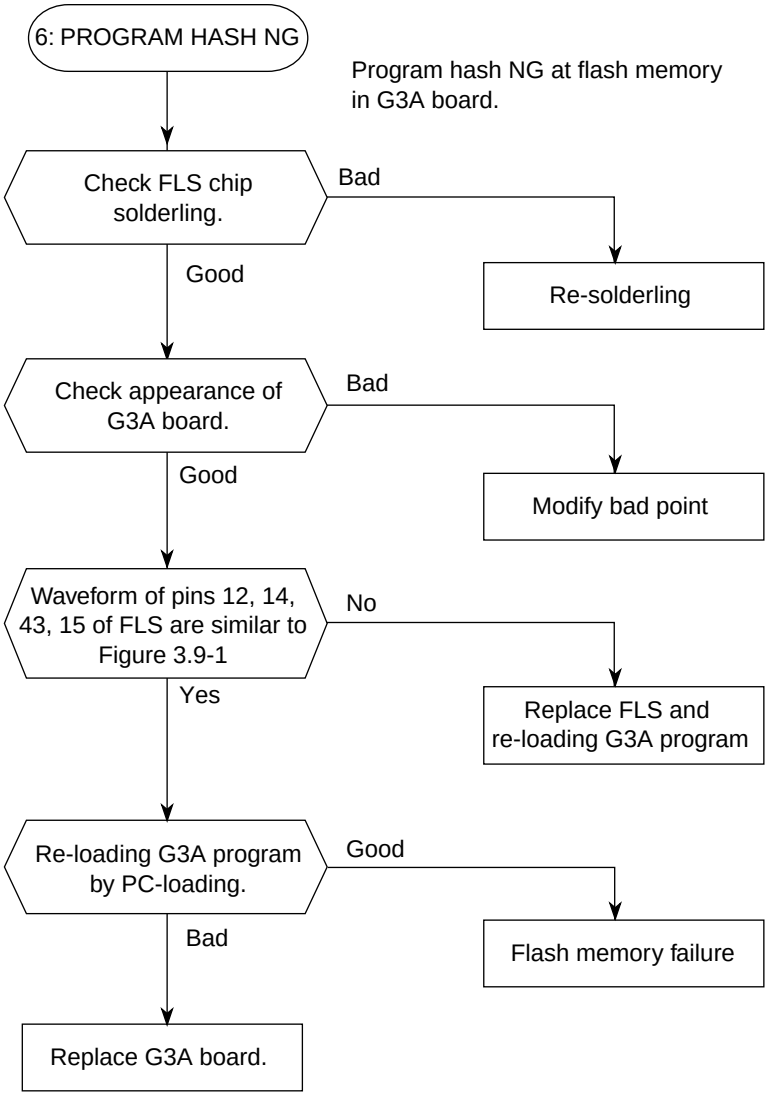
3.9.4 CPU ROM HASH NG



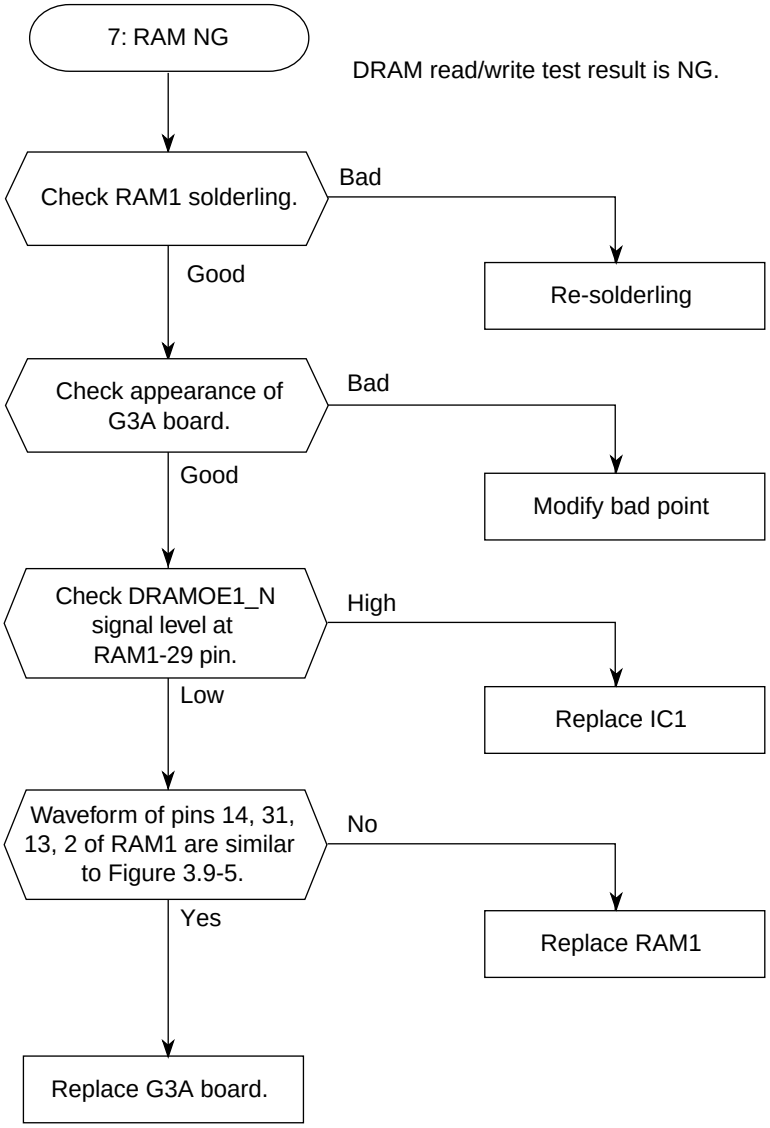
3.9.5 CPU RAM NG



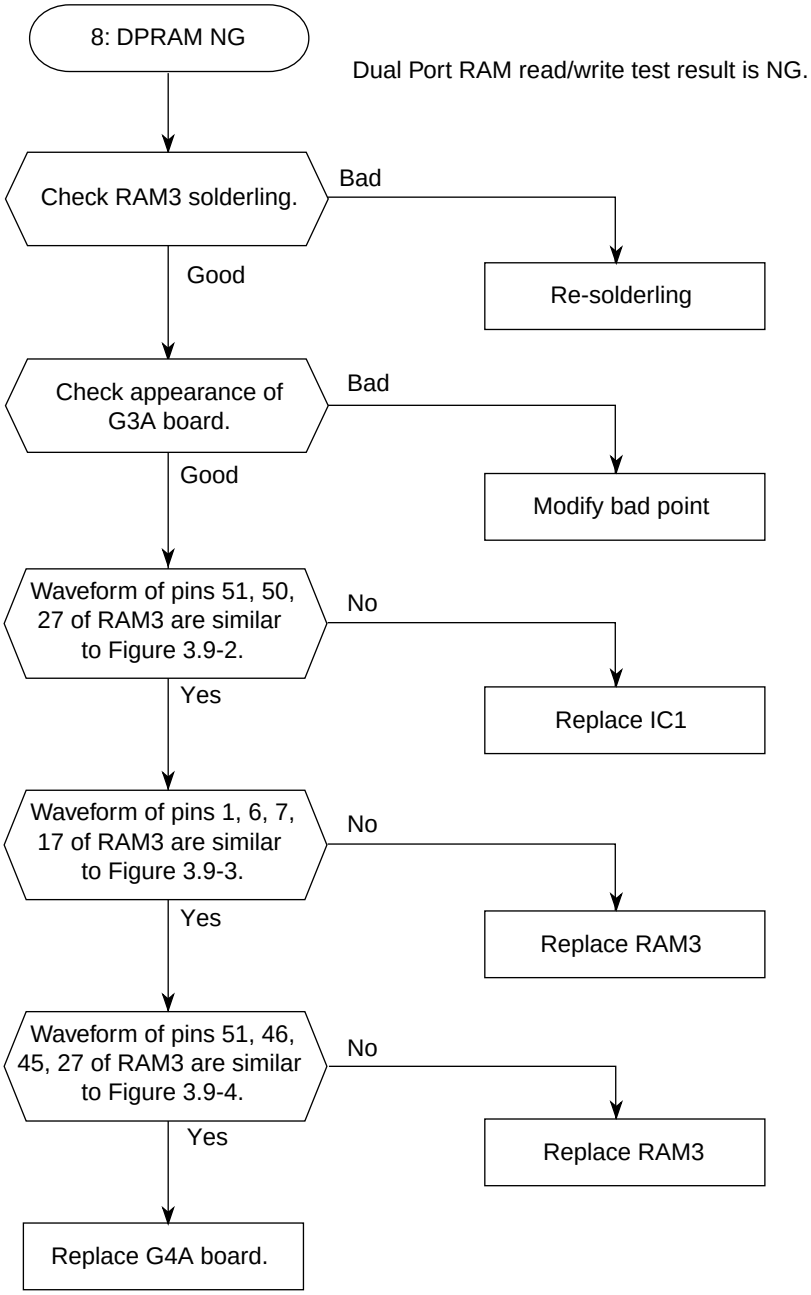
3.9.6 PROGRAM HASH NG



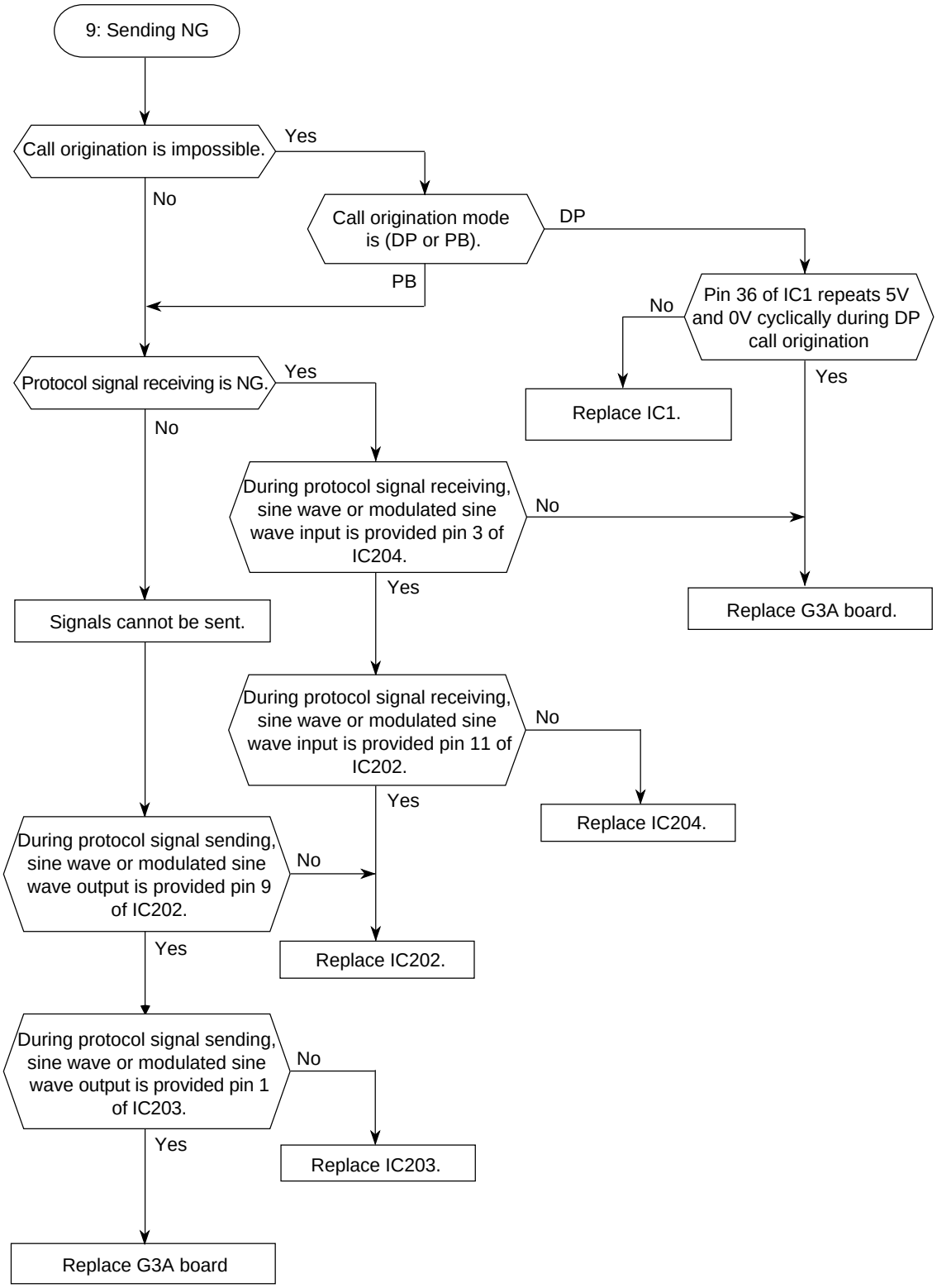
3.9.7 RAM NG


7: RAM NG
DRAM read/write test result is NG.
Check RAM1 solderling.
Bad
Re-solderling
Good
Check appearance of G3A board.
Bad
Modify bad point
Good
Check DRAMOE1_N signal level at RAM1-29 pin.
High
Replace IC1
Low
Waveform of pins 14, 31, 13, 2 of RAM1 are similar to Figure 3.9-5.
No
Replace RAM1
Yes
Replace G3A board.

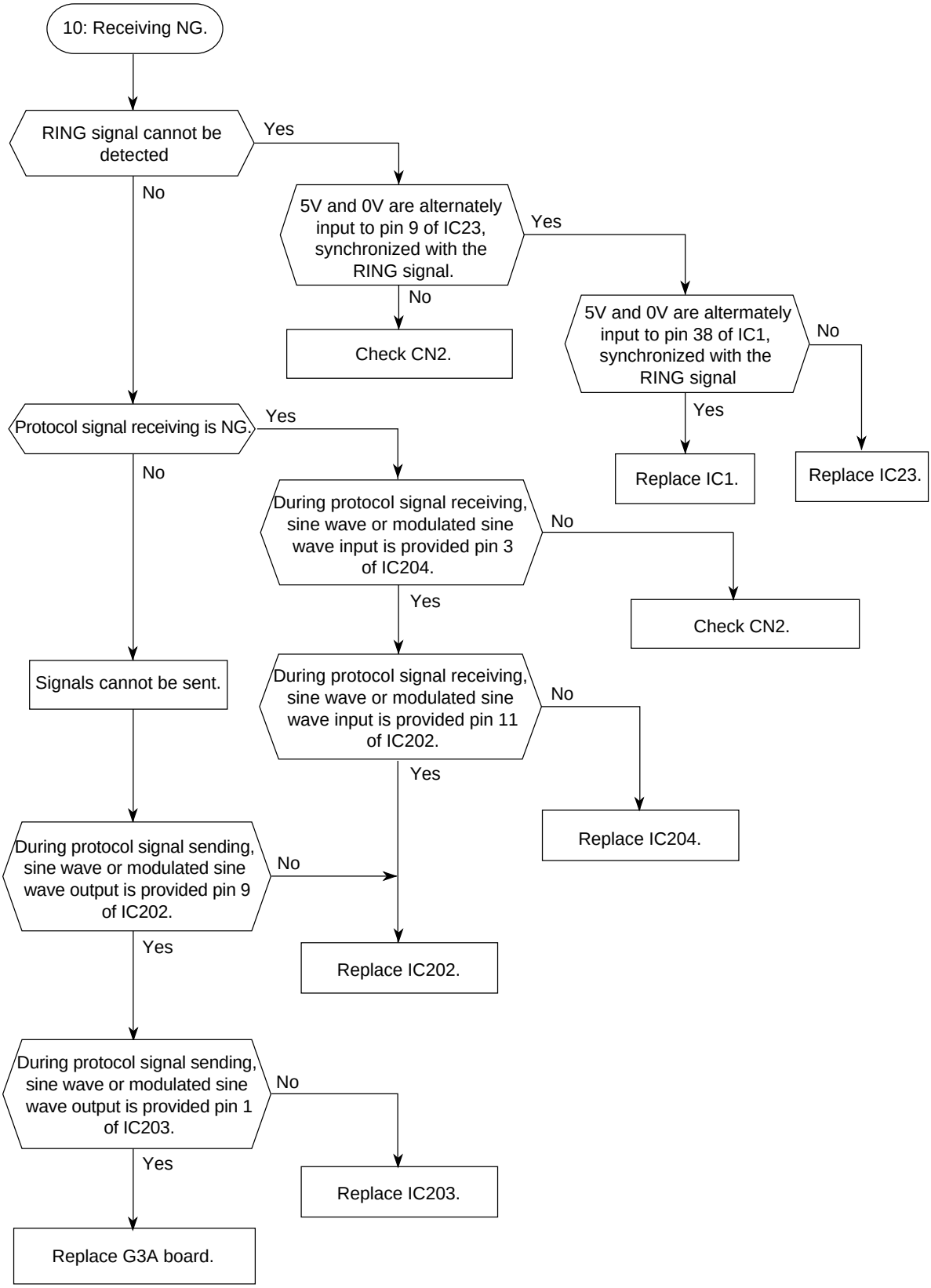
3.9.8 DPRAM NG


8: DPRAM NG
Dual Port RAM read/write test result is NG.
Check RAM3 solderling.
Bad
Re-solderling
Good
Check appearance of G3A board.
Bad
Modify bad point
Good
Waveform of pins 51, 50, 27 of RAM3 are similar to Figure 3.9-2.
No
Replace IC1
Yes
Waveform of pins 1, 6, 7, 17 of RAM3 are similar to Figure 3.9-3.
No
Replace RAM3
Yes
Waveform of pins 51, 46, 45, 27 of RAM3 are similar to Figure 3.9-4.
No
Replace RAM3
Yes
Replace G4A board.

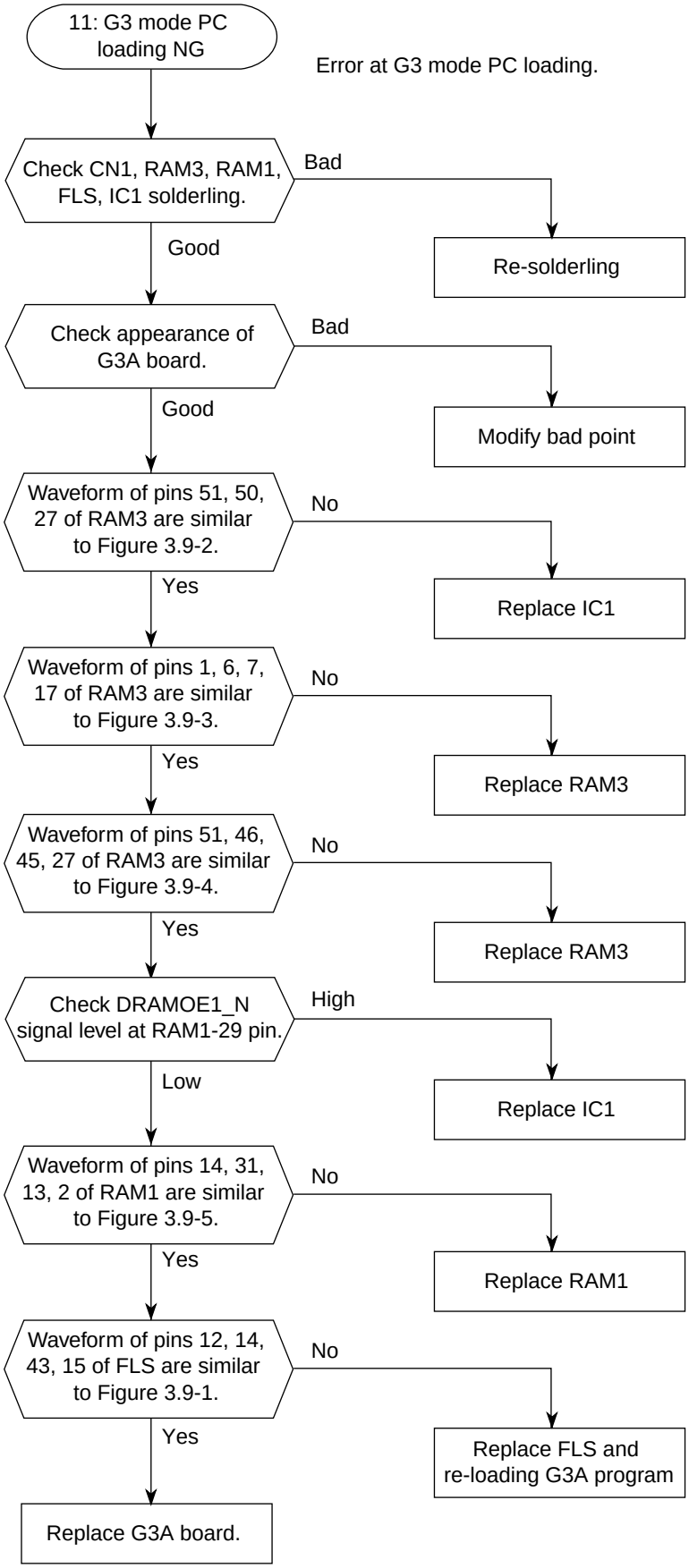
3.9.9 Sending NG


9: Sending NG
Call origination is impossible.
Yes
No
Call origination mode is (DP or PB).
DP
PB
Pin 36 of IC1 repeats 5V and 0V cyclically during DP call origination
No
Yes
Replace IC1.
Protocol signal receiving is NG.
Yes
No
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 3 of IC204.
No
Yes
Replace G3A board.
Signals cannot be sent.
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 11 of IC202.
No
Yes
Replace IC204.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 9 of IC202.
No
Yes
Replace IC202.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 1 of IC203.
No
Yes
Replace IC203.
Replace G3A board

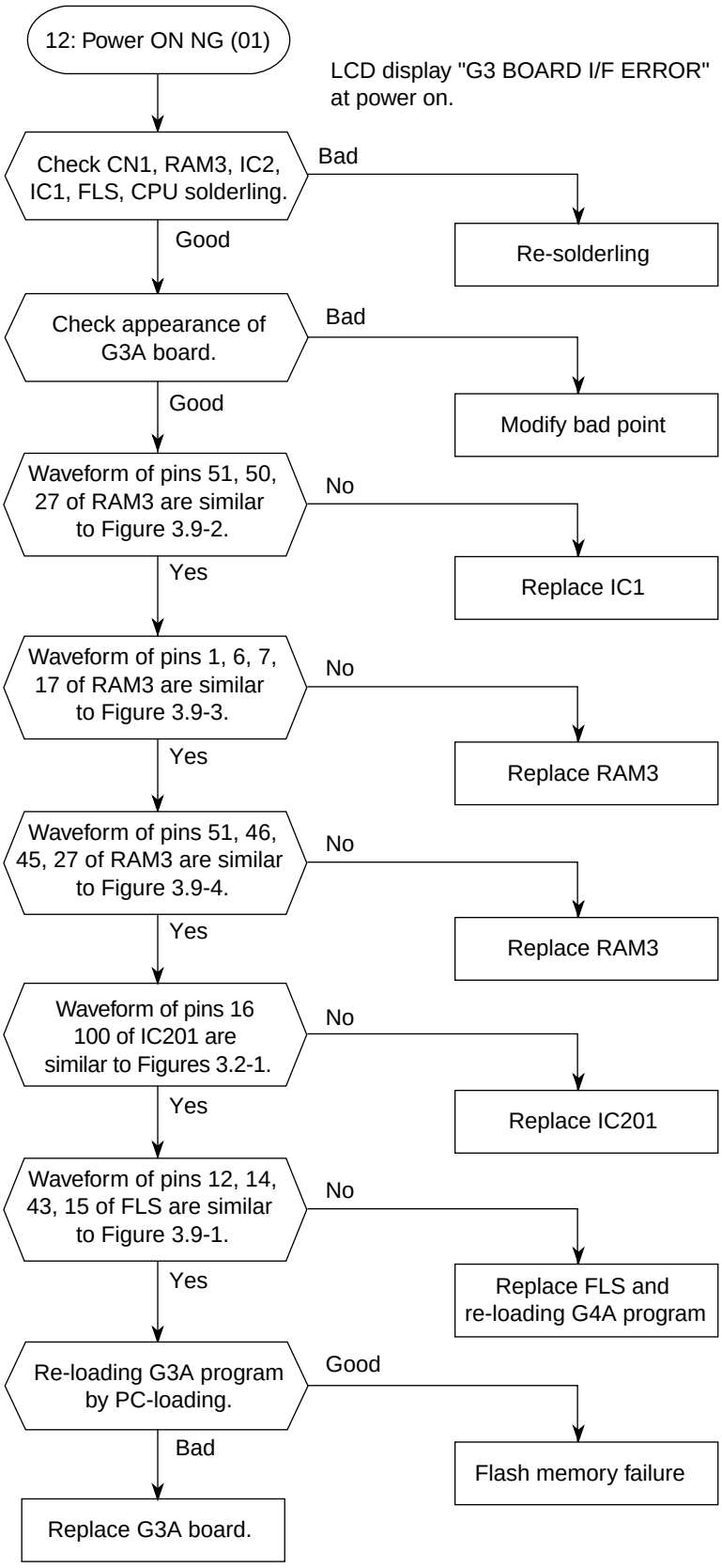
3.9.10 Receiving NG


10: Receiving NG.
RING signal cannot be detected
Yes
No
5V and 0V are alternately input to pin 9 of IC23, synchronized with the RING signal.
Yes
No
Check CN2.
5V and 0V are altermately input to pin 38 of IC1, synchronized with the RING signal
No
Yes
Replace IC1.
Replace IC23.
Protocol signal receiving is NG.
Yes
No
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 3 of IC204.
No
Yes
Check CN2.
Signals cannot be sent.
During protocol signal receiving, sine wave or modulated sine wave input is provided pin 11 of IC202.
No
Yes
Replace IC204.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 9 of IC202.
No
Yes
Replace IC202.
During protocol signal sending, sine wave or modulated sine wave output is provided pin 1 of IC203.
No
Yes
Replace IC203.
Replace G3A board.

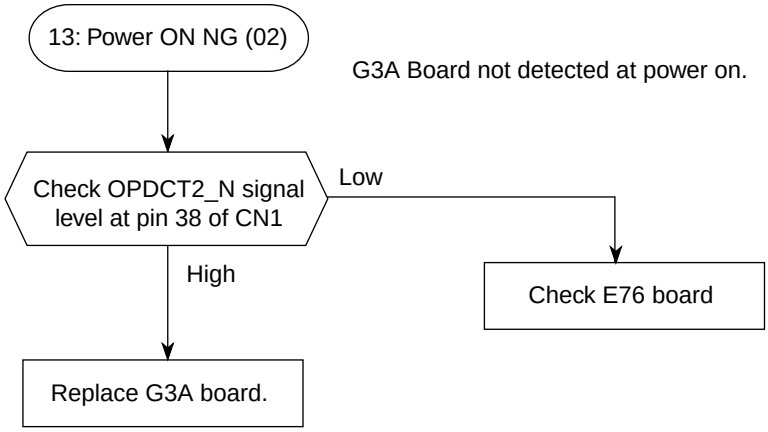
3.9.11 G3 mode PC loading NG


11: G3 mode PC loading NG
Error at G3 mode PC loading.
Check CN1, RAM3, RAM1, FLS, IC1 solderling.
Bad
Re-solderling
Good
Check appearance of G3A board.
Bad
Modify bad point
Good
Waveform of pins 51, 50, 27 of RAM3 are similar to Figure 3.9-2.
No
Replace IC1
Yes
Waveform of pins 1, 6, 7, 17 of RAM3 are similar to Figure 3.9-3.
No
Replace RAM3
Yes
Waveform of pins 51, 46, 45, 27 of RAM3 are similar to Figure 3.9-4.
No
Replace RAM3
Yes
Check DRAMOE1_N signal level at RAM1-29 pin.
High
Replace IC1
Low
Waveform of pins 14, 31, 13, 2 of RAM1 are similar to Figure 3.9-5.
No
Replace RAM1
Yes
Waveform of pins 12, 14, 43, 15 of FLS are similar to Figure 3.9-1.
No
Replace FLS and re-loading G3A program
Yes
Replace G3A board.

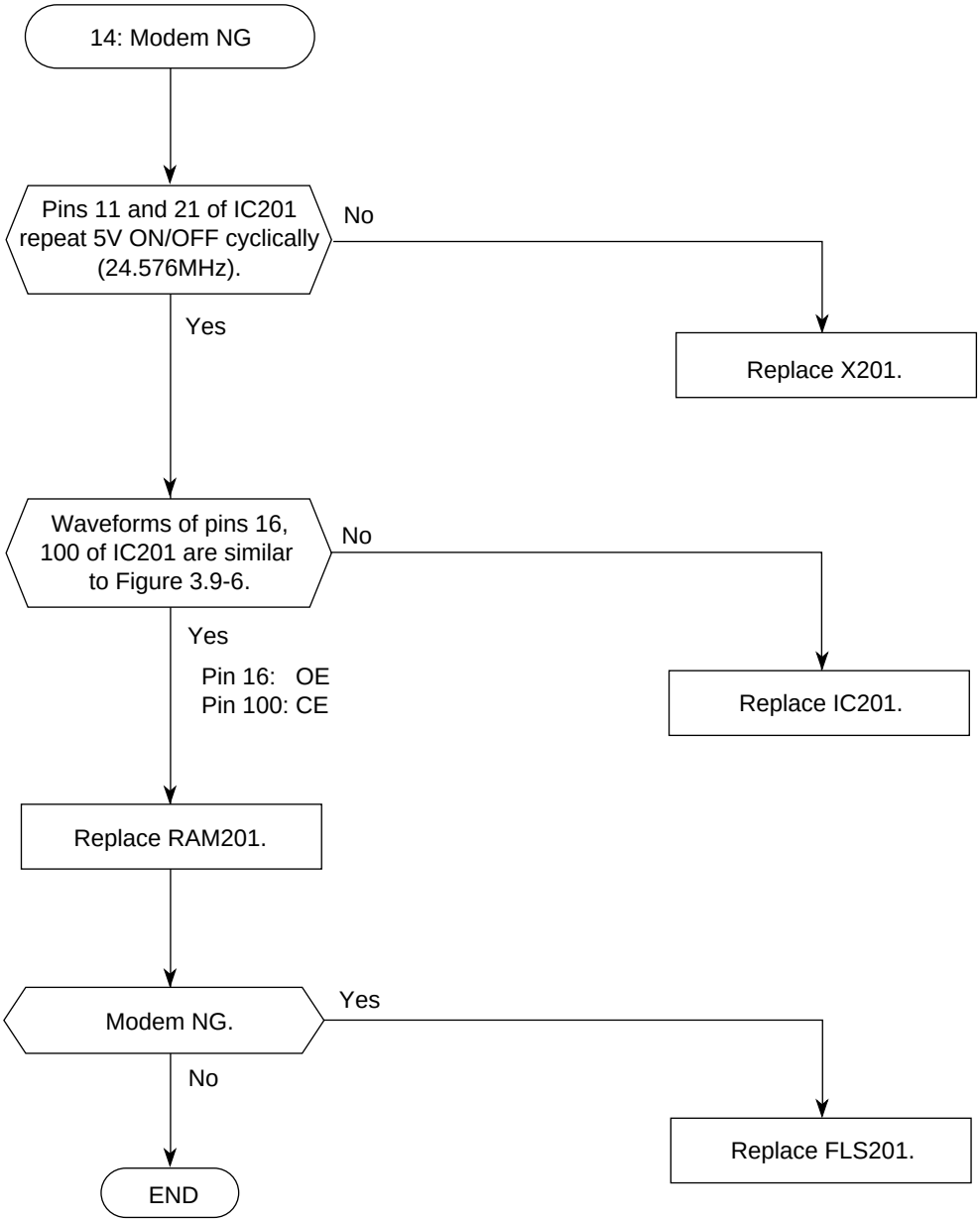
3.9.12 Power ON NG (01)


12: Power ON NG (01)
LCD display "G3 BOARD I/F ERROR" at power on.
Check CN1, RAM3, IC2, IC1, FLS, CPU solderling.
Bad
Re-solderling
Good
Check appearance of G3A board.
Bad
Modify bad point
Good
Waveform of pins 51, 50, 27 of RAM3 are similar to Figure 3.9-2.
No
Replace IC1
Yes
Waveform of pins 1, 6, 7, 17 of RAM3 are similar to Figure 3.9-3.
No
Replace RAM3
Yes
Waveform of pins 51, 46, 45, 27 of RAM3 are similar to Figure 3.9-4.
No
Replace RAM3
Yes
Waveform of pins 16 100 of IC201 are similar to Figures 3.2-1.
No
Replace IC201
Yes
Waveform of pins 12, 14, 43, 15 of FLS are similar to Figure 3.9-1.
No
Replace FLS and re-loading G4A program
Yes
Re-loading G3A program by PC-loading.
Good
Flash memory failure
Bad
Replace G3A board.

3.9.13 Power ON NG (02)


13: Power ON NG (02)
G3A Board not detected at power on.
Check OPDCT2_N signal level at pin 38 of CN1
Low
High
Check E76 board
Replace G3A board.

3.9.14 Modem NG



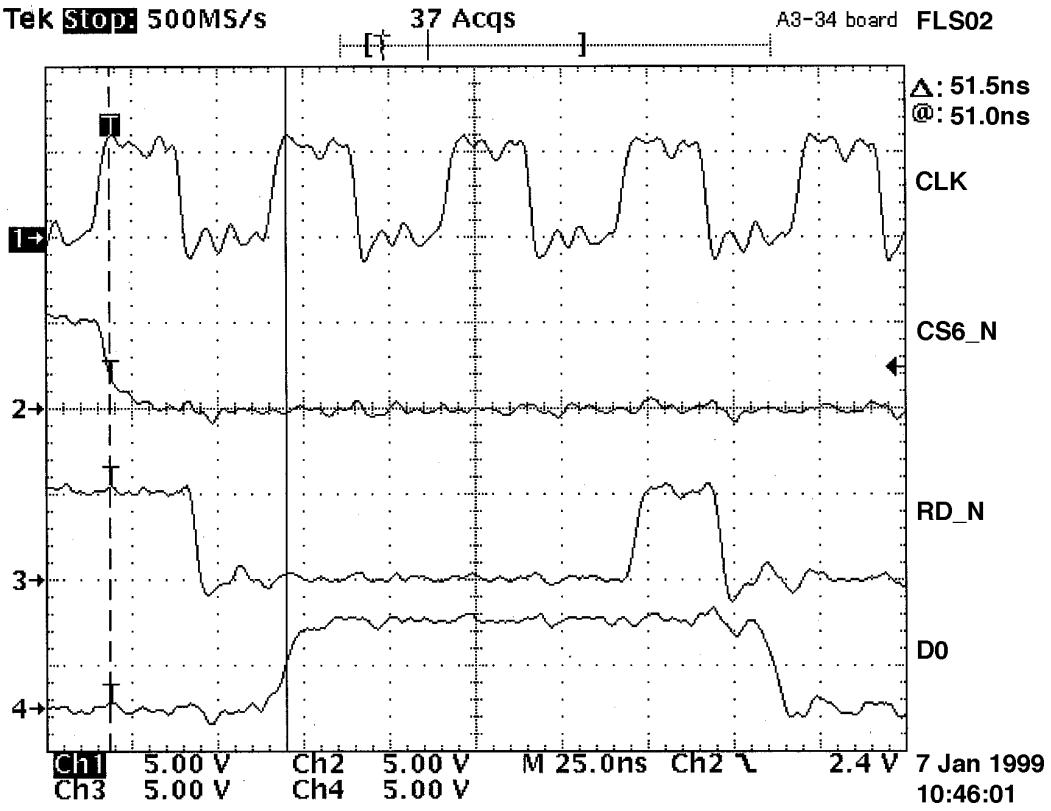


Fig. 3.9-1

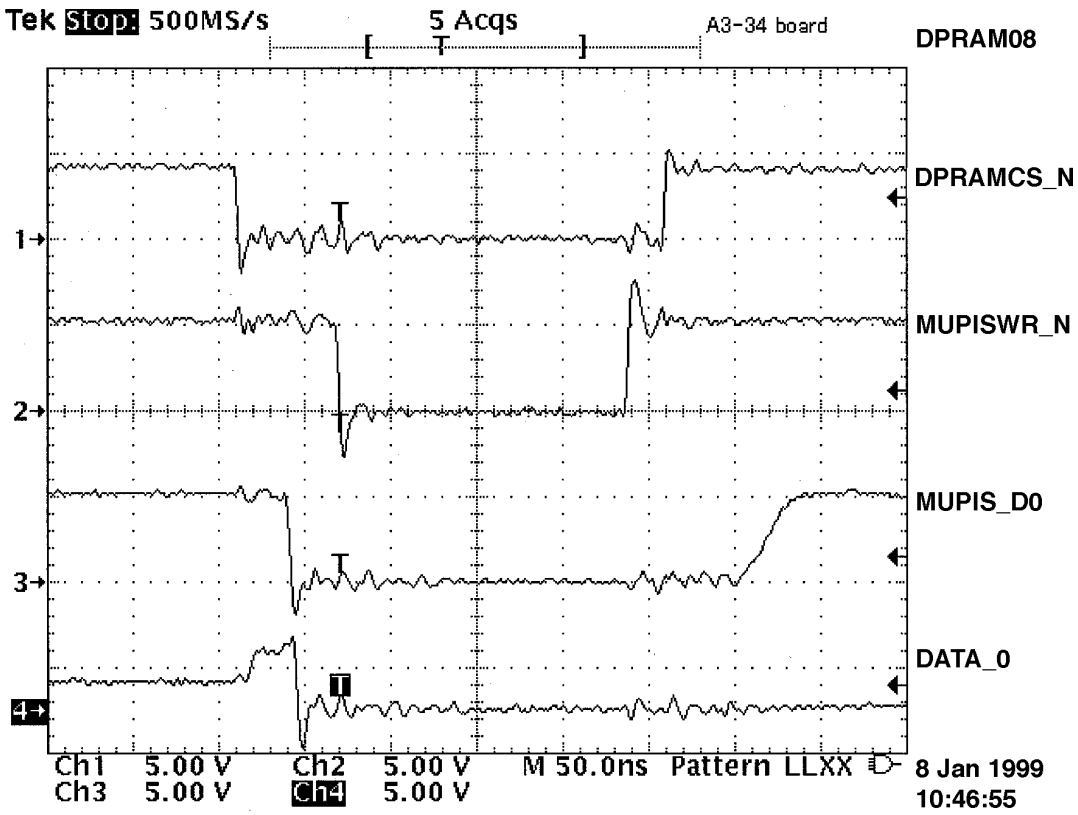
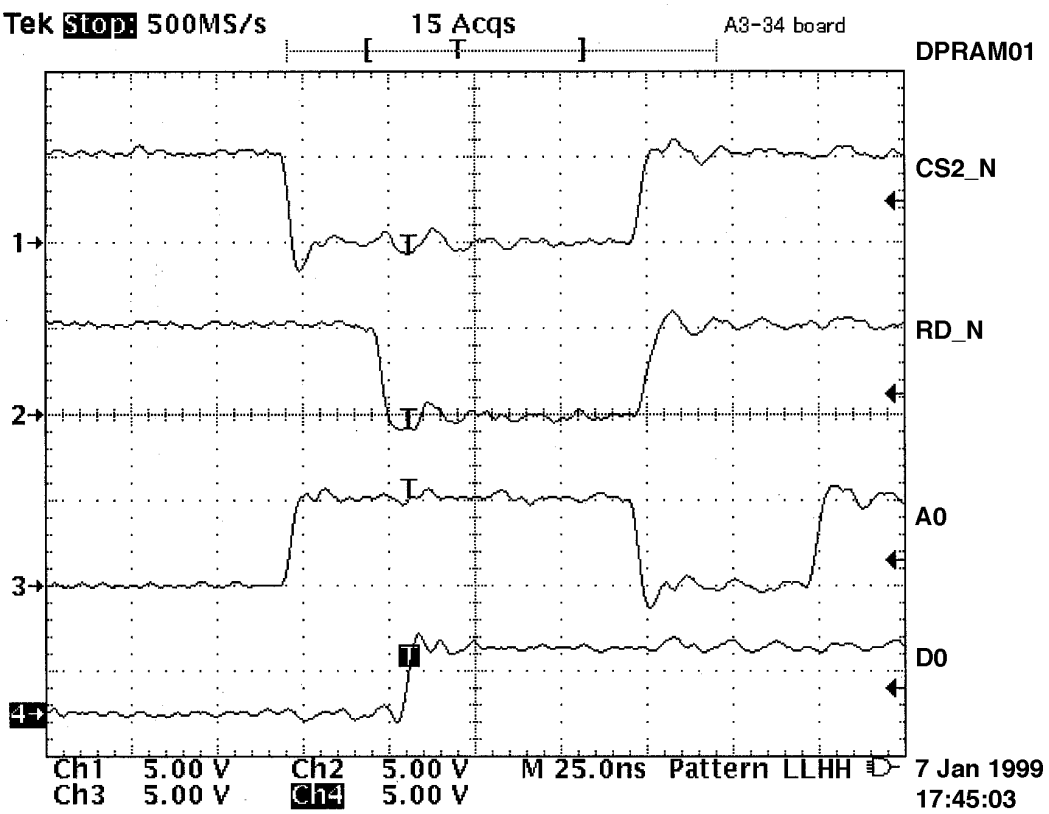
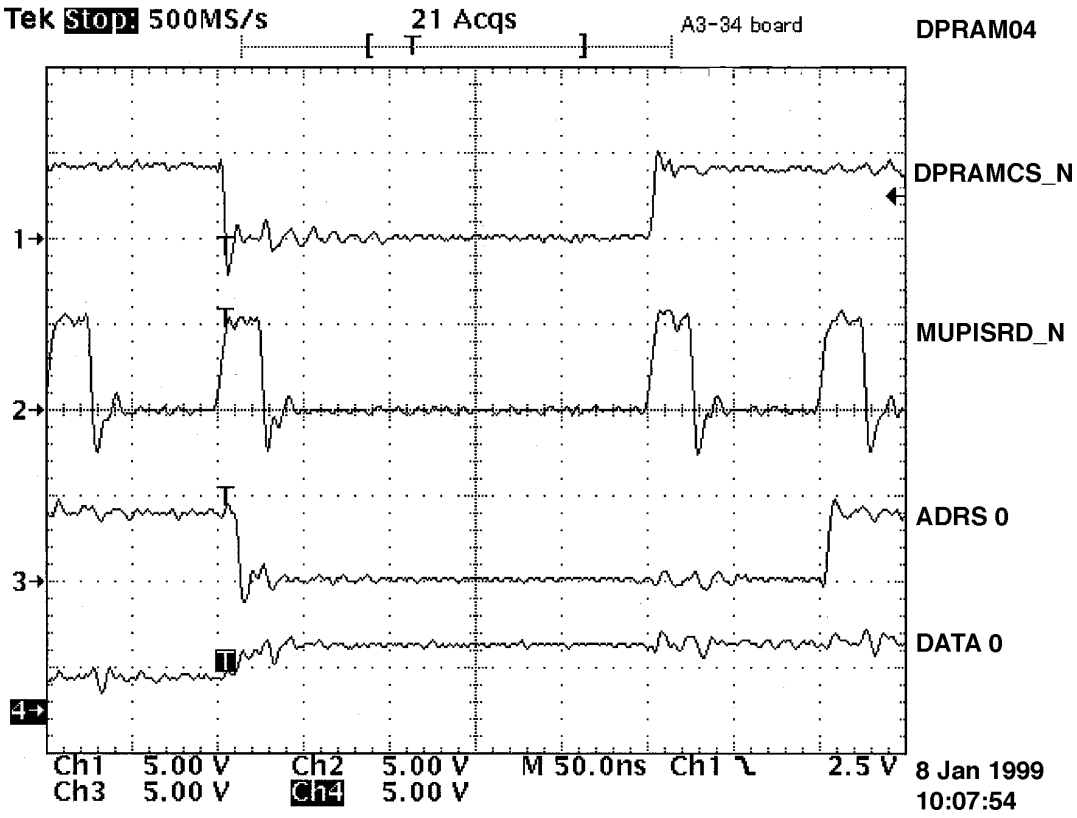


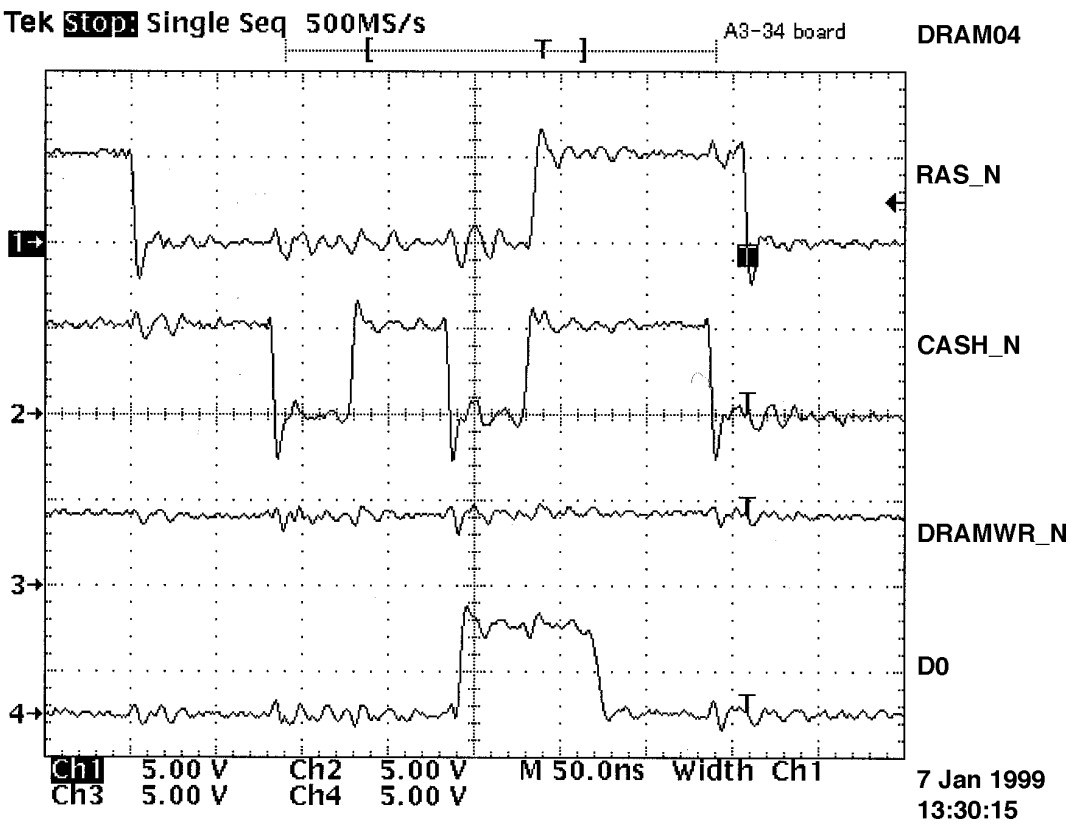
Fig. 3.9-2



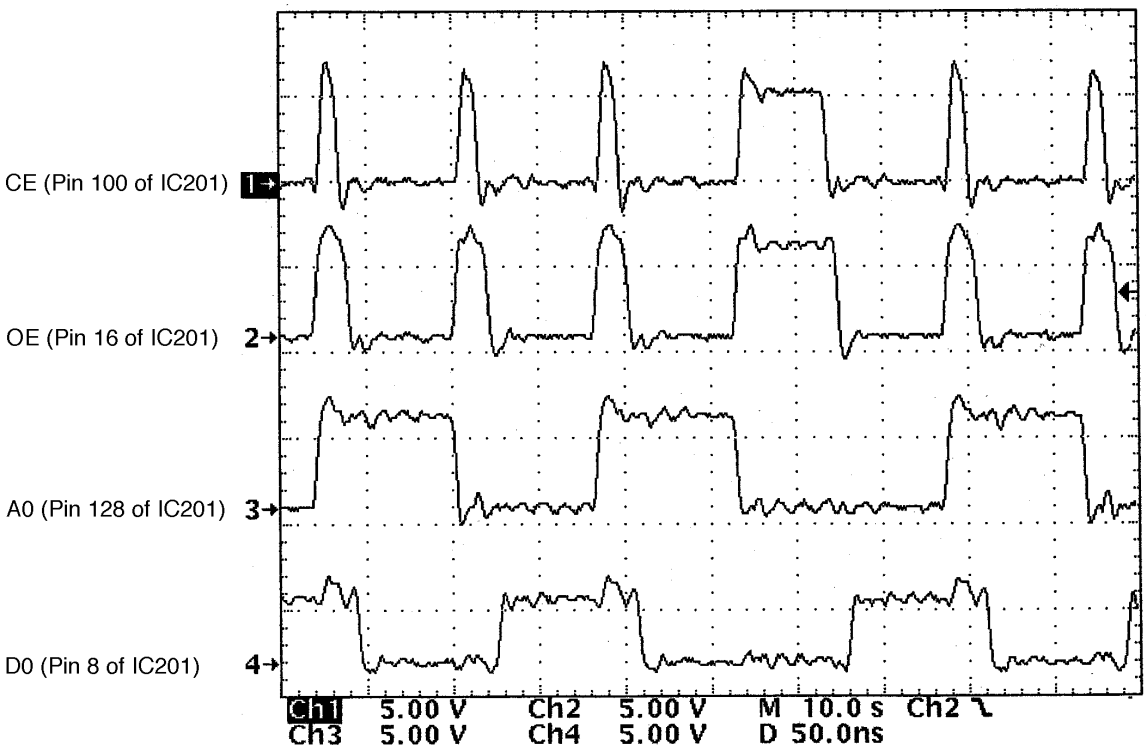
Fgi. 3.9-3



Fgi. 3.9-4



Fgi. 3.9-5


CE (Pin 100 of IC201) 1→
OE (Pin 16 of IC201) 2→
A0 (Pin 128 of IC201) 3→
D0 (Pin 8 of IC201) 4→
Ch1 5.00 V Ch2 5.00 V M 10.0 s Ch2
Ch3 5.00 V Ch4 5.00 V D 50.0ns

Fgi. 3.9-6

Appendix J INTERNET FAX & NETWORK PRINT / NETWORK SCANNER KIT MAINTENANCE GUIDE

1. Introduction

By installing this kit, you will be able to use the following functions:

a) Printing via a LAN (Local Area Network)
b) Sending and receiving internet facsimile
c) Network scanner
d) Gateway services

Supported LAN topologies, operating systems are as follows.

LAN:
10base-T Ethernet
100base-TX Ethernet (Fast Ethernet)

Operating systems supported by the printer driver:
Windows3.1
Windows95/98/Me
WindowsNT4.0
Windows2000
NetWare3.x
NetWare4.x
NetWare5.x

Note: Macintosh and UNIX are not supported.

Network Print Protocols
TCP/IP
IPX/SPX
NetBEUI

Internet fax Protocols
TCP/IP
SMTP
POP3
DNS

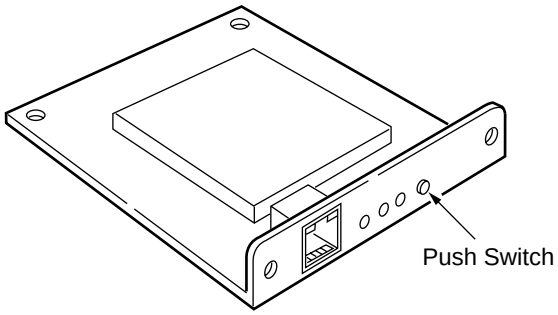
Management Protocols
SNMP
MIB

Follow the procedures in the order given bellow to install this kit.
“Component Identifications” on page 893.
“Installation” on page 894.

2. Component Identification

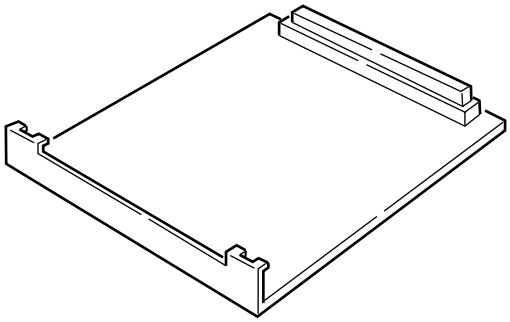
The Network Print Kit contains the following parts.

1. Network Card (see below)



2. CD-ROM which contains Printer Driver, Utility Manual, Quick Installation Guide (this document), Read-me.
   The "Printer Driver" and the "LPR Utility" and "Setup Utility" programs are installed onto the PC by an installer program.

3. Adapter Card

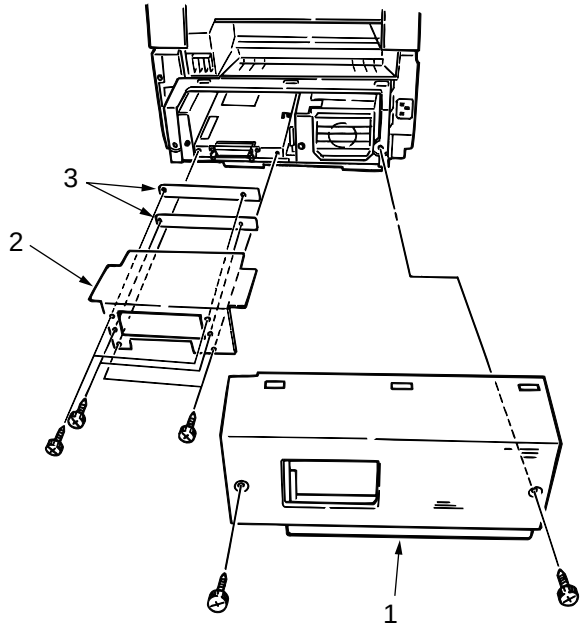


3. Installation

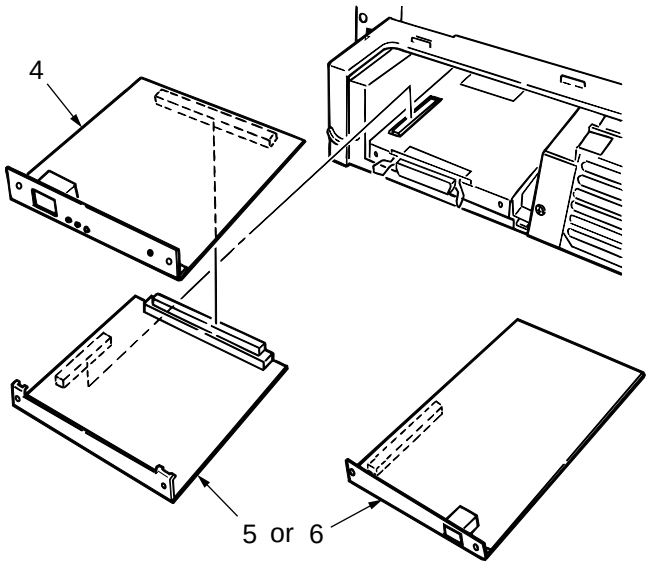
3.1 Network Card Installation

To install the network card into your fax machine;

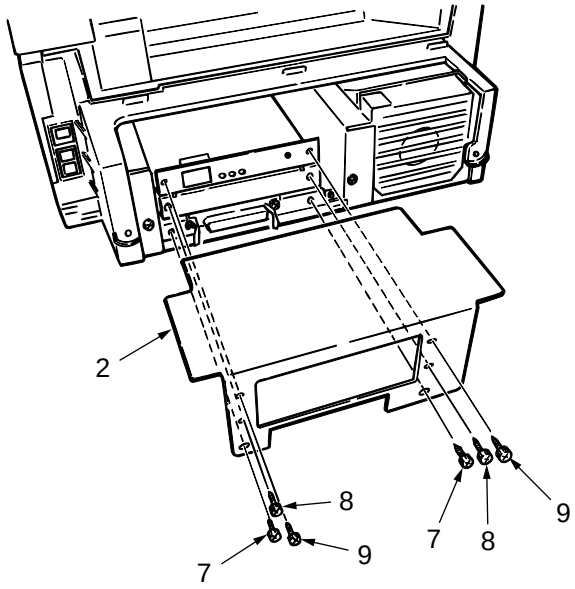
1. Remove rear cover (1), rear plate (2), and two dummy plates (3).



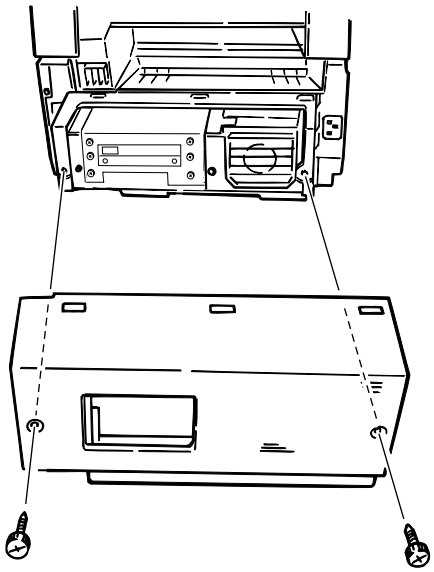
2. Connect network card (4) to adapter board (5) (or to G4 board (6)), then locate the assembly into the socket inside the fax machine.



3. Attach rear plate (2) and secure with 2 screws (7). Secure the network card and adapter card (or G4 board) with two screws each (8 and 9).



4. Attach rear cover.



4. Internet Fax Feature

4.1 Internet Fax Settings

4.1.1 General

Before using InternetFax, please consult your network administrator about correct settings. There are two types of setting values for InternetFax: data stored on the fax machine and data recorded on the Network Card. You can print out a list of the first type of setting values using the operation panel of the fax machine by selecting MENU + 5: REPORT PRINT + 6: CONFIGURATION. To print out the settings stored on the Network Card or its current status, select MENU + 5: REPORT PRINT + 9: NIC CONFIGURATION, or MENU + 5: REPORT PRINT + 10: NIC INFORMATION (NIC: Network Interface Card).
Alternatively, if you press the black push button on the Network Card for 3 seconds and release it, a report similar to that obtained from the NIC INFORMATION menu will be printed out, together with a Network Card self-diagnostic report.
Please note: if you turn the power on while pressing this button down, the Network Card will initialise its settings.

Note: Please read the Network Card manual supplied with the CD in conjunction with this document, as it also explains how to use the Network Card. Please note, however, that the descriptions in the manual are based on the case where the Network Card is installed on an LED Printer, and that operations described in it may not apply to this InternetFAX. The Network Card manual does not explain the functions of InternetFAX; for these, please see this manual instead. The Network Card settings explained in the manual for NetworkPrint also apply to your machine.

4.1.2 Setting Items

InternetFax settings are given in MENU + 5: SETUP + 6: LANOPTIONS. When LANOPTIONS is selected, the display will show User Functions (UF) 80 to 98. Of these settings, 80~82 are for network printing. Details of these settings are given in section 8: Network Printing. Settings from number 83 onward are for Internet Fax and will not be displayed if your Network Card does not have an InternetFax facility. Setting 98 (NETWORK SETTINGS) is for configuring the Network Card. These settings will be explained in detail further on and can be changed over a network using various tools.

Please consult your network administrator about the correct network settings to use.

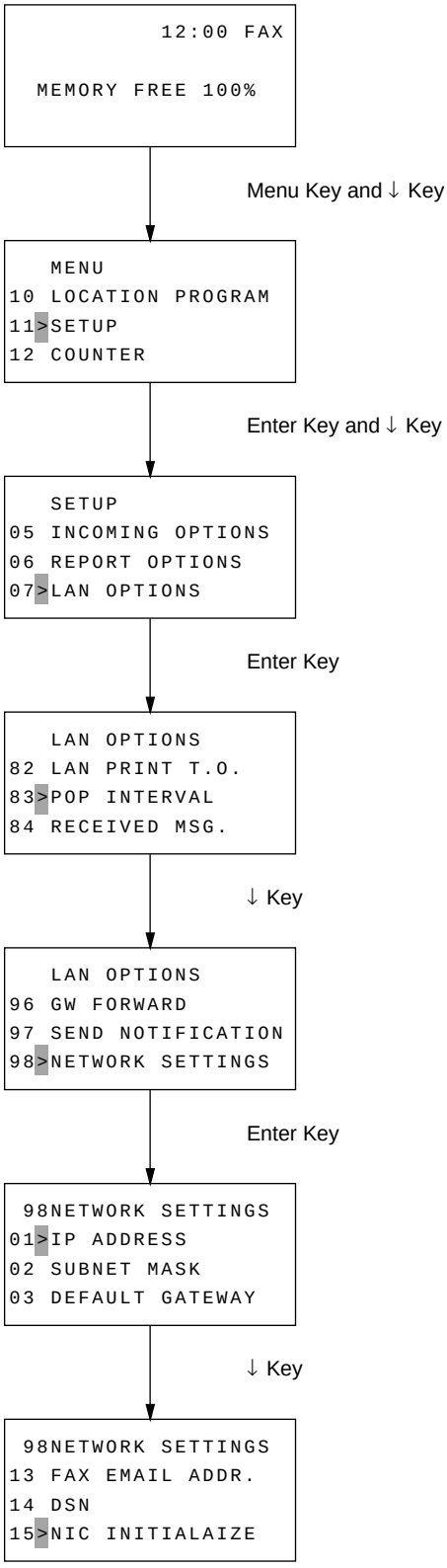


Fig.J-1 Overview of operation

• UF83: POP INTERVAL
OFF/1MIN/5MIN/10MIN/30MIN/60MIN/DAILY

* When the DAILY setting is selected, POP TIME (Receiving Action Time) should be set. (Maximum registered number : 4 kinds)
* When the setting is DAILY but the POP TIME is not registered, then the auto POP receiving action will not done. (The action is the same to the OFF setting.)
* After POP TIME is registered, even if the setting is changed from DAILY to another one, but the POP TIME registered will not be eliminated.

If set at OFF, no automatic receptions will be carried out.

• UF84: DELETE POP MSG.
Whether or not to delete received e-mail from the mail server.
OFF: Do not delete mail
TYPE1: Delete only the mail this FAX can print out (*1)
TYPE2: Delete all mail

Note: If a setting other than TYPE2 has been selected, mail will remain on the server, so be sure to delete mail from the server manually, e.g., from another PC. This machine keeps a log of up to 50 communications, which is used to prevent any messages that have already been read from being received again. However, if there are more than 50 messages on the server, you may start receiving the same messages repeatedly. When you have deleted mail data on the mail server from a PC, please activate POP reception on this machine while there is no mail. This operation will erase the log of the 50 previous communications.
If automatic POP reception is carried out while there is no mail, the log will also be erased. Therefore, if you regularly delete mail on the server before the number of records on the log reaches 50, this operation will not be necessary.

*(*1) Even when any communication error occurs in POP Gateway Service, if this setting is enabled, the mail will not be deleted.*

• UF85: TIME BETWWEN GMT.
Time difference from GMT. This value is required in order to create email headers; be sure to enter this setting.

• UF86: TEXT PRINT.
Whether or not to print the body text of email.
If this setting is ON, the text in email will be printed out.
Please note that only US-ASCII characters in the text can be printed; any characters that cannot be printed will be shown as spaces. Depending on the mail client used, text may not be printed or come out garbled.

Note : With Microsoft Outlook, there is a setting to send an Email body by the HTML format. When the setting is the HTML format, then the body will be sent by both TEXT and HTML format. If the one received, Fx-056vp/176vp will print out only the TEXT portion.
However, if the setting is HTML format and there is an attached file, then the HTML portion will be printed out as it is.
When the Outlook is used, please use the Text as the sending format.

Table.J-1 List of supported characters

	00	10	20	30	40	50	60	70	80	90	A0	B0	C0	D0	E0	F0
0			SP	0	@	P	`	p								
1			!	1	A	Q	a	q								
2			“	2	B	R	b	r								
3			#	3	C	S	c	s								
4			$	4	D	T	d	t					Ä		ä	
5			%	5	E	U	e	u								
6			&	6	F	V	f	v						Ö		ö
7			‘	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l	|						Ü		ü
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o							ß		

• UF87: HEADER PRINT.
Email header print setting.
OFF: Do not print header
TYPE1: Print SUBJECT/FROM/TO
TYPE2: Print all header information
This setting will be valid only when the TEXT Print setting is ON.

• UF88: CODING MODE
Coding mode for TIFF file images sent by Internet Fascimile.
Select from MH/MR/MMR.
Please note that other manufacturers’ Internet Fax products often support only MH. This machine supports MR and MMR modes in addition to MH.
The rate of compression: MH (low) / MR (medium) / MMR (high).

• UF89: EX.FINE MODE
Scan resolution of EX.FINE mode for Internet fax: choose 300dpi or 600dpi.

• UF90: SENDER ID (EMAIL)
Whether or not to add the sender ID to images scanned by Internet fax.
This setting will always apply when using Internet fax, regardless of the setting for UF23: SENDER ID ON/OFF.
When using InternetFax as a scanner, turn this setting off to prevent the sender ID data from appearing in scanned images.

Also when this setting is On, the sender ID should be added for the main body of the sending Internet FAX. See 4.2.6 for the details.

• UF91: DOMAIN NAME
This setting is required when forwarding email received by SMTP to PSTN/ISDN.
You can enter up to 5 domain names from which data may be received, each up to 64-character long. When an SMTP reception request is received, the email will be received only if the sender's domain name matches one of the registered domain names. If there is no match, the machine will assume that the email cannot be received by FAX and will not start reception.
For example, if you register **network.com**, only the email from domain **network.com** or its sub-domain will be received.

Note: You can input Latin letters, numbers and symbols one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: ***! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~***
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

• UF92: RETURN RECEIPT
Whether or not to add MDN to transmissions. MDN (Message Disposition Notification) is a request for confirmation on whether or not the message has been read, and if the recipient is an Internet Fax or a mail client that supports MDN, it will return this confirmation. The format of the notification varies depending on the type of the receiving Internet Fax or mail client.. If the recipient is the same Internet Fax machine as yours, notification in the following RFC-compliant format will be transmitted.
See 4.4.1 for the details of the format.

Note:
- *This setting determines whether or not an MDN request will be sent with transmission.*
  If this machine receives mail accompanied with an MDN request, it will always return MDN to the sender regardless of this setting.
  If a file other than the TIFF formats compatible with this Internet Fax is received and the REPORT setting under UF73: ERR. REPORT (MCF.) is ON, error MDN will be returned to the sender automatically regardless of the MDN setting.
- *When this setting is ON, the recipients of transmission return MDN; to print it, you must turn the TEXT PRINT setting ON.*
- *About UF93, the Receipt Format, it is available to change the MDN sending format to the TEXT format.*

• UF93: RECEIPT FORMAT
This is to set the format of the Return Receipt Confirmation (MDN).
The setting value is TEXT / MDN
TEXT : The format that can be seen the normal mailer.
MDN : The format based on the RFC. (MDN : Message Disposition Notifications)

See 4.4.1 for the detail of the format.

• UF94: SEND FILE FORMAT
When an Email is sent, the setting value to decide if either of TIFF/PDF will be used to send the read manuscript is TIFF / PDF.

Note: PDF receiving is not available.

• UF95: POP GW SETTING
This is to set the SUBJECT and PASSWORD specified for the Email when the POP GATEWAY SERVICE is requested.

① Number of digits for SUBJECT registration.
20 digits (The available characters are the same to the Email Address.)

② Number of digits for PASSWORD registration.
20 digits (The available characters are the same to the Email Address.)

Note: Password registration is necessary. If the setting is done without it, then the registered contents of the Subject are automatically eliminated, and vice versa.

• UF96: GW FORWARD TEXT
This is to set if the TEXT portion will be sent or not by the GATEWAY Service.

• UF97: SEND NOTIFICATION
This is to set if the message (main body) will be attached when an Email is sent.

• UF98: NETWORK SETTINGS
By selecting UF: 98, you can alter the following network settings.

Note: After making changes to these settings, you have to press the MENU key to put the machine in stand-by mode. After a few seconds' pause, the LCD will indicate that the Network Card is being initialised, and the data on the Network Card will be updated when this message disappears. Please do not press the MENU key again while the initialisation message is on display as it may prevent the settings from being updated correctly.

1: IP ADDRESS
Sets the IP address.

2: SUBNETMASK
Sets the subnet mask.

3: DEFAULT GATEWAY
Sets the default gateway address.

4: SMTP SERVER NAME
Either the IP address or the host name of the SMTP mail server up to 64 characters may be entered here. The host name (e.g., mail.network.com) can be used if DNS has been set; otherwise, enter the IP address of the server. The address must include the "." (period) dividers (e.g., 192.168.004.123).

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: **! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~***
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

5: POP SERVER NAME
Either the IP address or the host name of the POP mail server up to 64 characters may be entered here. The host name (e.g., mail.network.com) can be used if DNS has been set; otherwise, enter the IP address of the server. The address must include the "." (period) dividers (e.g., 202.250.111.123).

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: **! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~***
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

6: POP USER ID
You can enter the user ID registered on the POP3 server, which must be alphanumerical characters no more than 16 characters long.

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: ! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~*
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

7: POP PASSWORD
The password registered on the POP3 server may be entered, which must be alphanumerical characters no more than 16 characters long. If a password has already been registered, it will be shown as 16 Xs to ensure that it will remain protected.

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: ! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~*
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

8: DNS P .SRV ADDRESS (Domain Name Service Primary Server)
Sets the IP address of the DNS primary server.
This will not be required if the server is connected directly using its IP address.

9: DNS S .SRV ADDRESS (Domain Name Service Secondary Server)
Sets the IP address of the DNS secondary server.
Enter this setting only if a secondary server has been set up.

10: HOST NAME
Enter the host name defined on this machine. Maximum length: 64 characters.

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: ! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~*
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

11: FAX Email Address
Enter the email address defined on this machine. Maximum length: 64 characters.

*Note: You can input Latin letters, numbers and symbols using one-touch keys. To enter symbols, use either one-touch key 20 or ten key "0". The symbols that can be used are: ! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~*
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

12: DSN (Delivery Status Notification)
If a mail server that has a DSN function receives a message, it will send a delivery confirmation to the sender of the message. If the mail server to which you are going to send a message does not support DSN, it will be advisable to change this setting to OFF as the server may not be able to handle the message correctly and cause a communication error. Some servers can send mail to mail servers which does not have the DSN function, and no delivery notification will be sent in this case.
In order for this machine to receive a delivery notification, the TEXT PRINT setting must be turned on.

Note: When a message is sent with this setting ON, the recipient of the transmission returns MDN; to print it, you must turn the TEXT PRINT setting ON.

13: NIC INITIALIZE
Initialises the Network Card back to its original factory settings.

[Important!] No warning message will be given if this option is selected. Please check carefully before carrying out this operation.

4.1.3 Web

This machine is web capable, and its network settings can be changed via a web tool (such as Internet Explorer and Netscape Navigator). In addition to the settings explained in Section 7.1.2, you can change the items listed below. Please also see the Network Card manual, which contains detailed information about these settings, but note that the contents of the web page you access will be slightly different from the page for the Network Card that does not support Internet Fax. These differences are also explained here.

• Printer Status
The main web access screen. Shows the message given on the LCD display of this machine.

• Network Status
Shows the status of TCP/IP, NetWare and NetBEUI.

• TCP/IP
See the attached Network Card manual.

• NetWare
See the attached Network Card manual.

• NetBEUI
See the attached Network Card manual.

• EtherTalk
Not supported by this machine; please do not alter this setting.

• SNMP
See the attached Network Card manual.

• Internet Fax
The settings explained in Section 7.1.2 can be entered here in addition to the following items, which are accessible only through the web:

a) SMTP Transmit: Whether or not to enable SMTP transmission protocol
For normal operations, this setting should be left at Enable.

b) SMTP Receive: Whether or not to enable SMTP reception protocol
This should normally be set at Enable. If you do not wish to receive by SMTP, change this setting to Disable
Note: SMTP reception is used to forward incoming mail by FAX.

c) POP3: Whether or not to enable POP reception protocol
For normal operations, this setting should be left at Enable.

d) SMTP port number: SMTP protocol port number.
The default setting is 25; do not change it unless necessary.

e) POP port number: POP protocol port number.
The default setting is 110; do not change it unless necessary.

f) Use APOP: Available when using a POP server that supports APOP.
With APOP, the POP password will be encrypted before it is sent. If this setting is turned on when using a server which does not support APOP, it will cause a communication error.

• Printer Menu
(Paper and Trays, Timers and Alarms, Emulations)

This menu will not be displayed for this machine. Even if it is, you will not be able to change its settings.

4.1.4 Adminmanager

Using this tool, you can configure the Network Card on Windows95/98/NT4.0 via the network. The settings available through Adminmanager are mostly the same as those accessible through the web. Please also see the Network Card manual, which contains detailed information about these settings, but, like the web access, you will notice some differences from the Network Card that does not support Internet Fax. The following section explains the tabs within Adminmanager.

When Adminmanager is started up, it first shows a list of Network Cards connected to printers and facsimiles. Check their MAC addresses to select the Network Card you wish to configure. The MAC address is shown on the Network Card Report explained earlier.
Now, select the Network Card you wish to configure and go to MENU R Setup R Device Setup. You will be able to change the following settings.

• General
Set the password.

• TCP/IP
The following settings can be changed:
a) Enable DHCP/BOOTP or RARP
b) IP Address, Subnet mask and Default Gateway
c) Enable Banner for FTP/LPR
d) DNS settings

• NetWare
NetWare server settings. For details, please see the Network Card manual. Please note that the position of the Pserver menu is different for InternetFAX, and so is the method for setting Pserver NDS and Bindery.
Please also see the help menu of the tool.

• EtherTalk
Not used by this machine.

• NetBEUI
Please see the attached Network Card manual.

• EtherTalk
Not supported by this machine; please do not alter this setting.

• SNMP
Please see the attached Network Card manual.
The Printer TRAP facility of the tool supplied with InternetFAX has been expanded.
You can add up to 5 addresses in TCP/IP as Printer Traps and also an extra address in IPX/SPX, for which trap alarms can be specified individually.
Please also see the help menu of the tool.

• Internet Fax
The settings accessible through the web can also be changed here.

4.1.5 Telnet

As this machine is Telnet capable, the network settings can be changed using Telnet via the network. Please also see the Network Card manual, which contains detailed information about these settings, but, like the web access, you will notice some differences from the Network Card that does not support Internet Fax.

4.2 Internet Fax Transmission

4.2.1 Registering Addresses

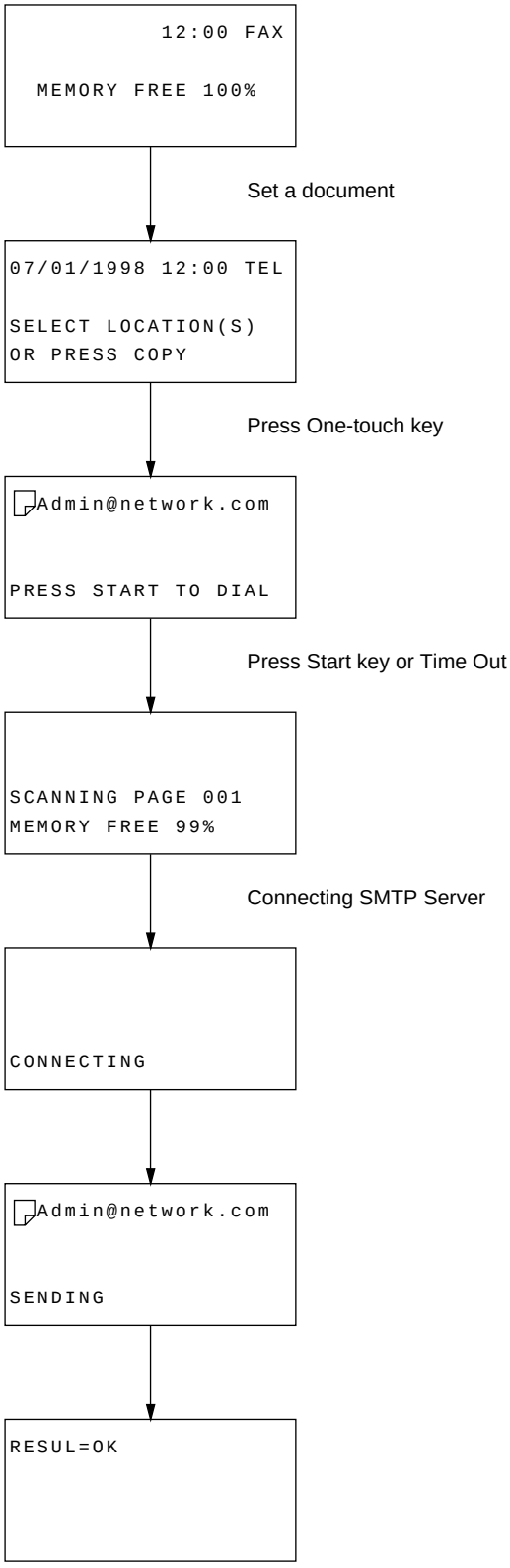
You can assign email addresses up to 64 characters long onto one-touch keys 01~80 and spend dial 01~90. It is also possible to make up a group dial of email addresses assigned to one-touch dial numbers, but you cannot register one-touch dial numbers for both email addresses and telephone numbers onto a single group.

Note: You can register onto one-touch keys email addresses consisting of Latin letters, numbers and symbols. These characters are assigned to one-touch keys, and symbols can be entered using one-touch key 20 or ten key "0".
*The symbols that can be used are: **! # & ' ( ) * + , - . / : ; = ? • @ ? " _ % ~***
The "~" (tilde) symbol will appear on the LCD as "-1". Both upper-case and lower-case letters can be used; to switch between the cases, press one-touch key 31 (CAPS key).

4.2.2 Sending a Document

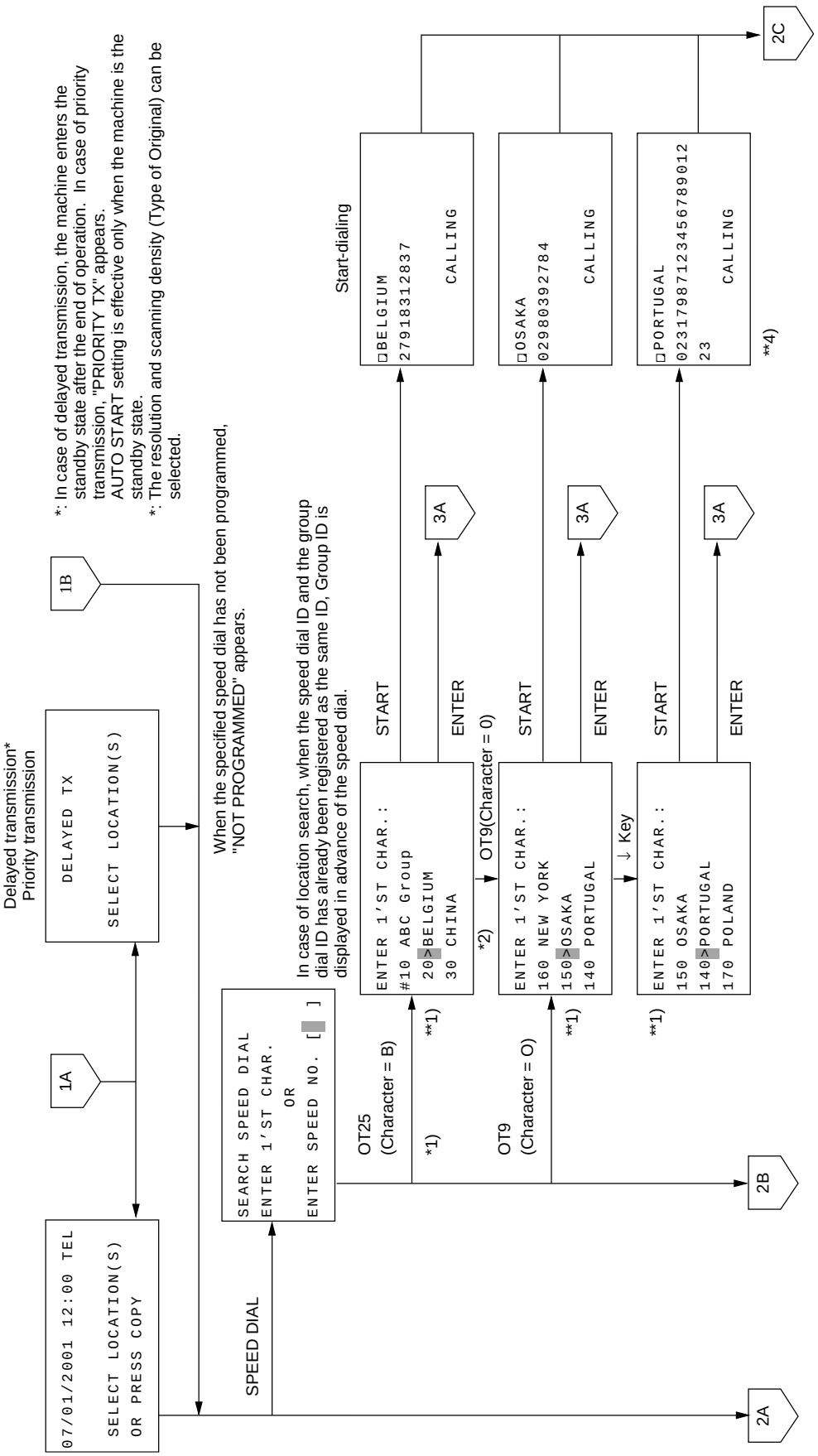
Place a document on the machine, press the one-touch key on which the recipient's email address is assigned and press Start. After storing the document's image data on memory, the machine will establish a server connection. When this is done, the "Sending" message will be displayed. At the end of the transmission, the result will be displayed on the LCD, and a buzzer will sound. You can send a document to several email addresses by pressing the one-touch keys on which they are assigned, but you cannot send it to recipients for whom telephone numbers rather than email addresses are registered on one-touch keys. If you select the same email address twice, the document will be sent to it only once. If you wish to specify full email addresses, select Email-key to enter full email addresses individually. It is available to set the Sender ID On/Off, Return Receipt On/Off, to specify location to the To:, CC:, to enter the Subject and to enter the From address. See the operation flow for the details. And also, with the communication parameter of the Speed Dial, it is available to set the Sender ID On/Off, Return Receipt On/Off and to change Ftiff / PDF of the File Format.
To stop transmission, press the Stop key. Please note that the transmission will be terminated at once without asking for confirmation.

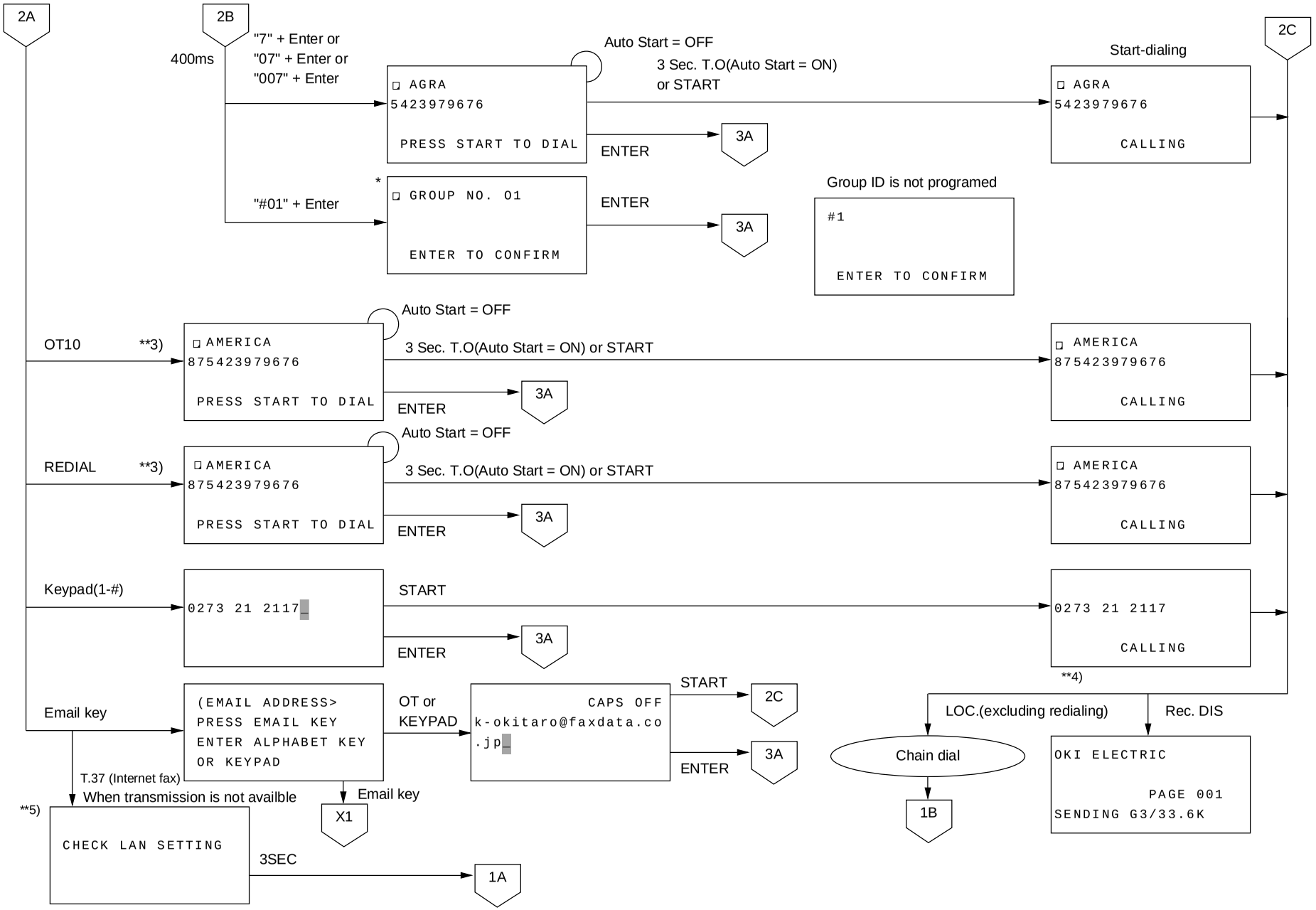
InternetFAX data is scanned into memory before transmission. If the document is too long to fit into memory, divide it up and make two or more transmissions. The installation of an add-on memory is recommended if you have not yet done so.

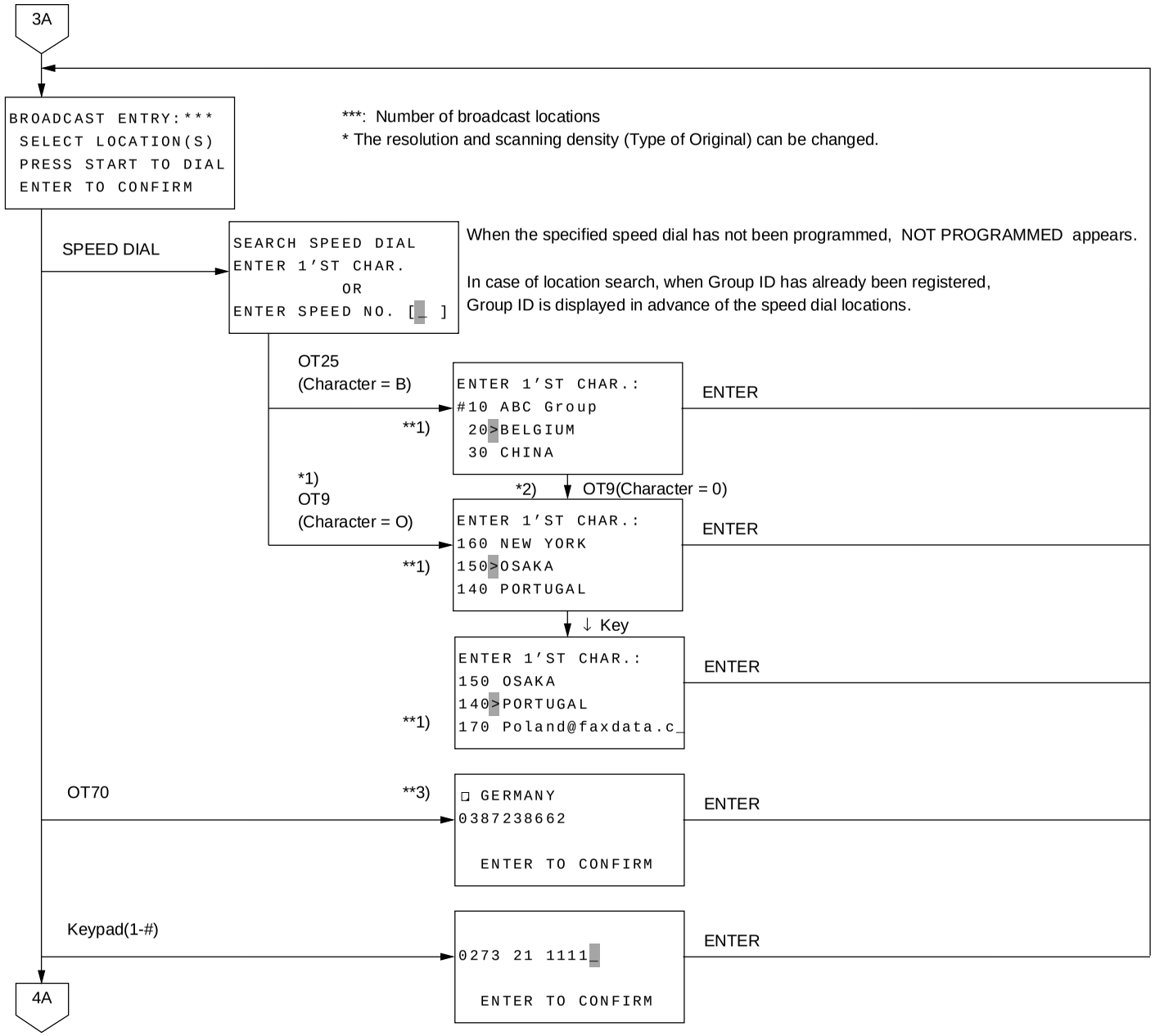


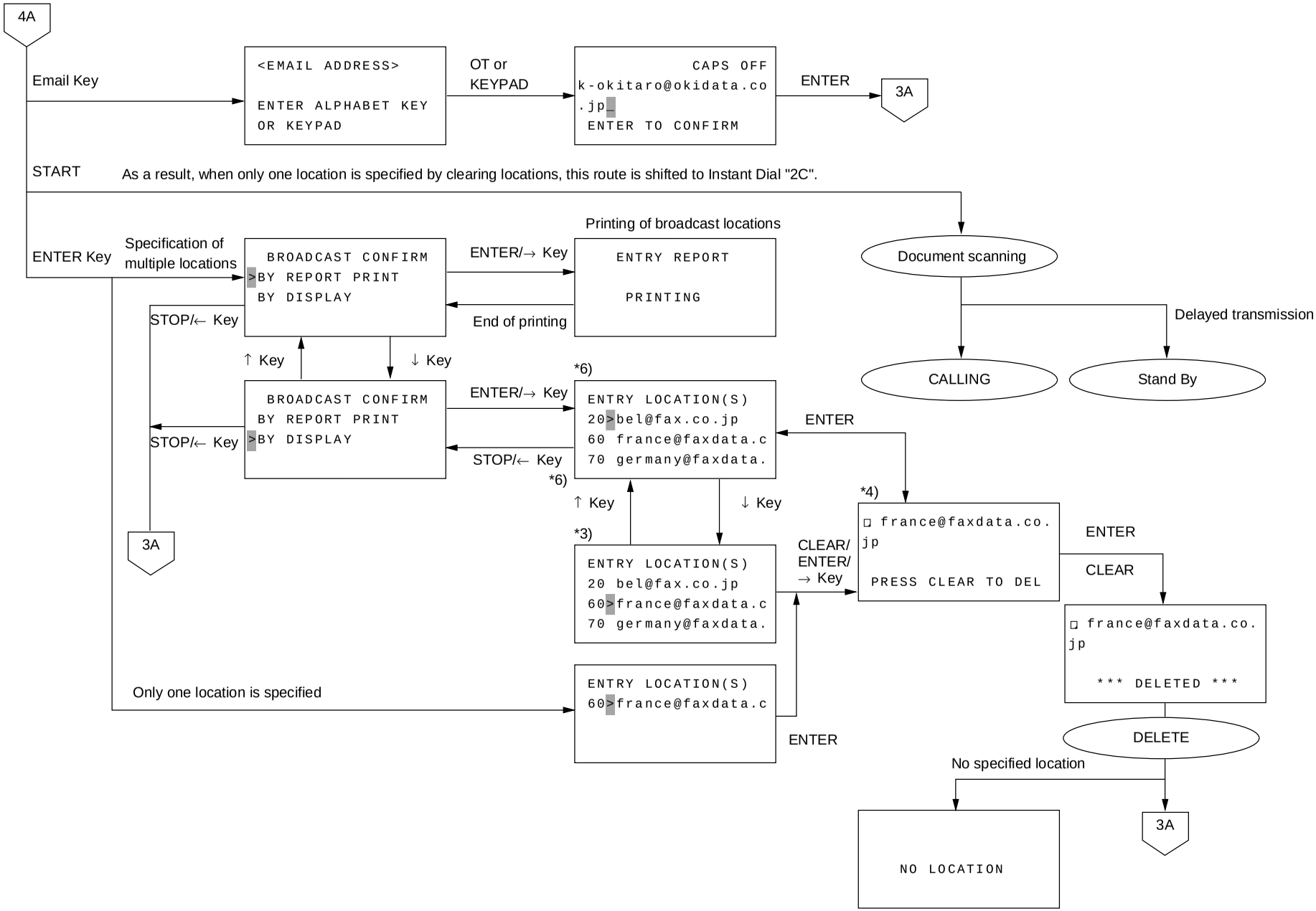
InternetFAX transmission flowchart

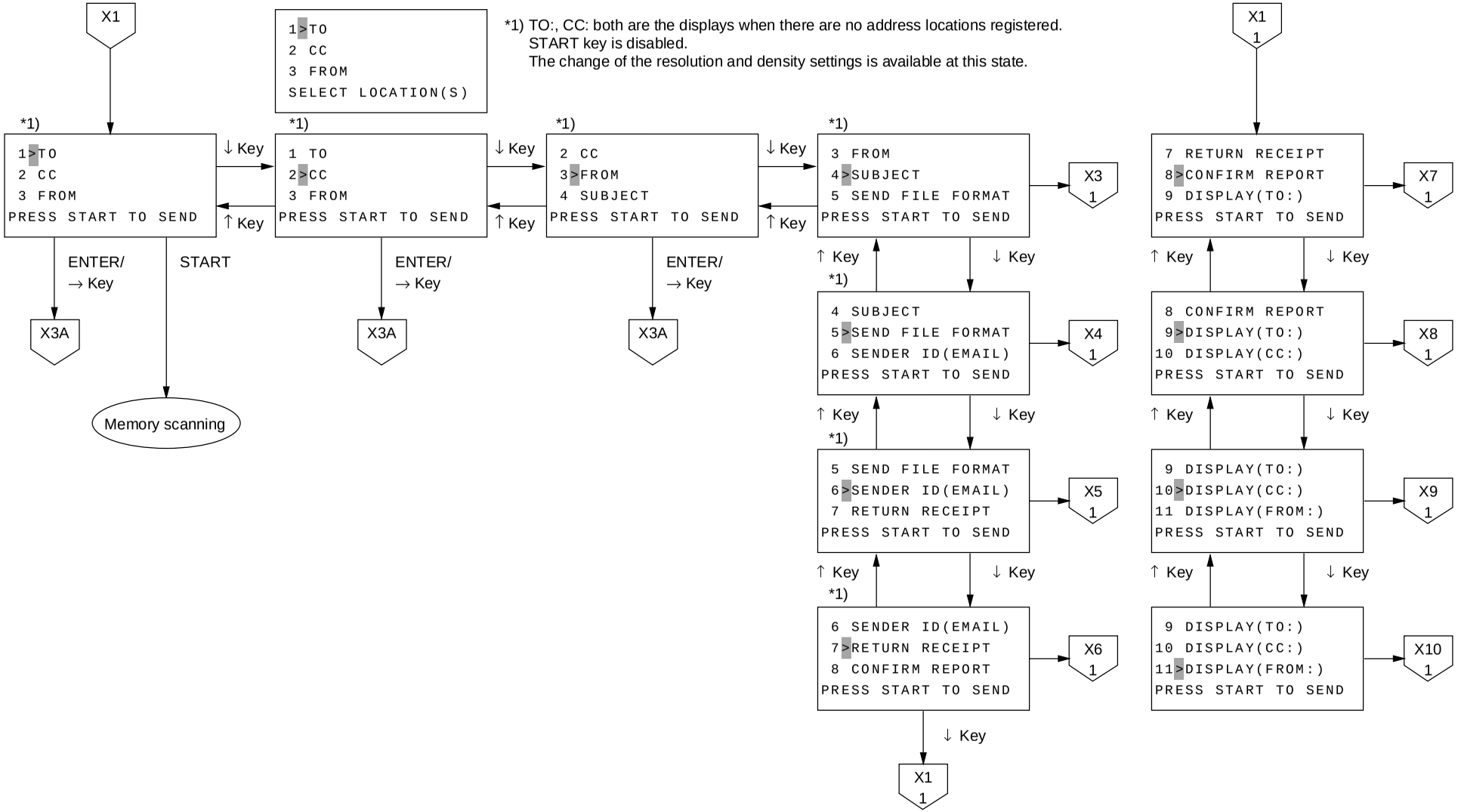
4.2.3 Internet FAX transmission flowchart (specifying recipients)

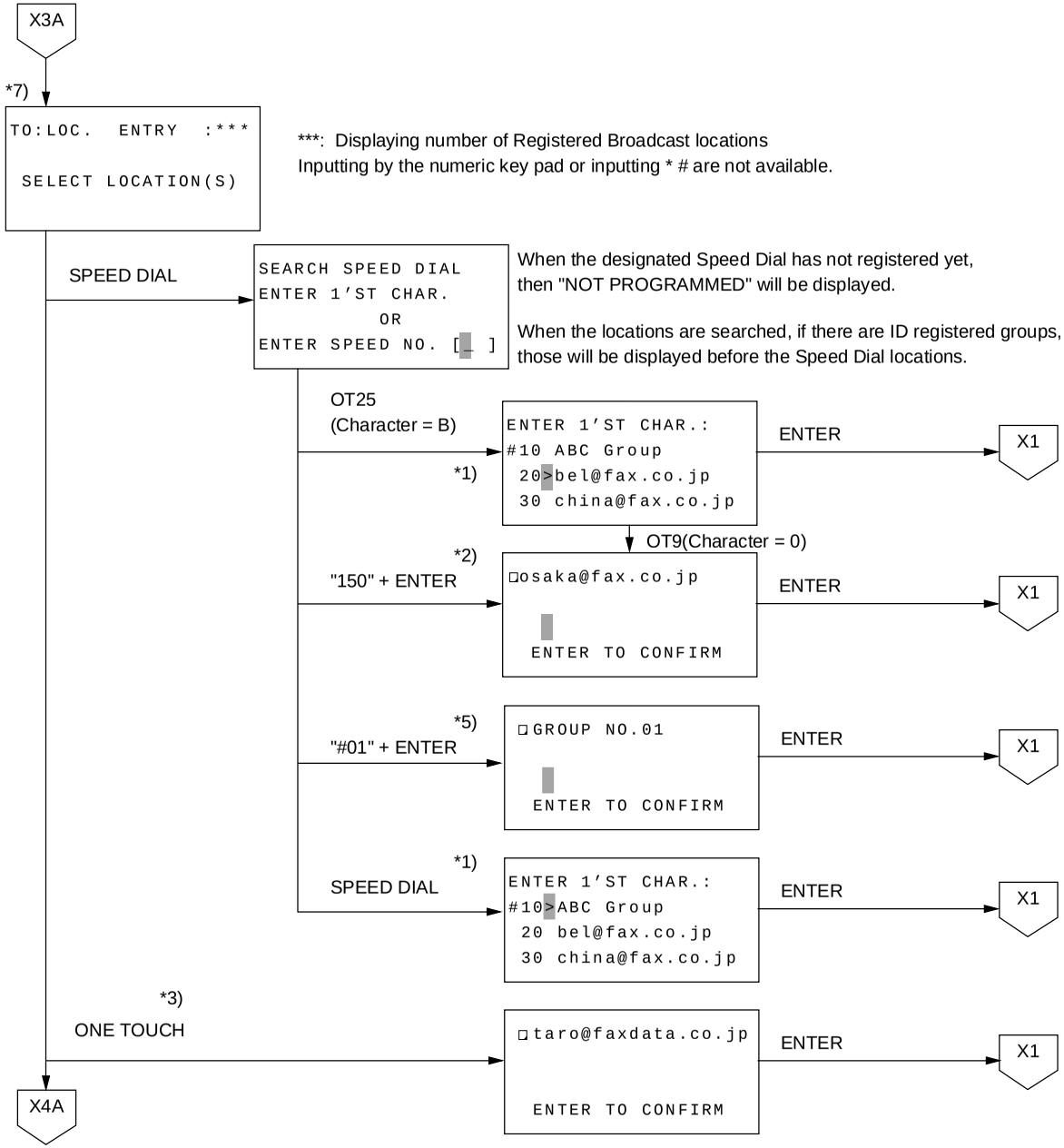



2A
2B
400ms
"7" + Enter or
"07" + Enter or
"007" + Enter
"#01" + Enter
❑ AGRA
5423979676
PRESS START TO DIAL
Auto Start = OFF
3 Sec. T.O(Auto Start = ON)
or START
ENTER
3A
*
❑ GROUP NO. 01
ENTER TO CONFIRM
Group ID is not programed
#1
ENTER TO CONFIRM
2C
Start-dialing
CALLING
OT10
**3)
❑ AMERICA
875423979676
REDIAL
Keypad(1-#)
0273 21 2117_
START
Email key
(EMAIL ADDRESS>
PRESS EMAIL KEY
ENTER ALPHABET KEY
OR KEYPAD
OT or
KEYPAD
CAPS OFF
k-okitaro@faxdata.co
.jp_
T.37 (Internet fax)
When transmission is not availble
Email key
X1
**5)
CHECK LAN SETTING
3SEC
1A
**4)
LOC.(excluding redialing)
Rec. DIS
Chain dial
1B
OKI ELECTRIC
PAGE 001
SENDING G3/33.6K


3A
BROADCAST ENTRY:***
SELECT LOCATION(S)
PRESS START TO DIAL
ENTER TO CONFIRM
***: Number of broadcast locations
* The resolution and scanning density (Type of Original) can be changed.
SPEED DIAL
SEARCH SPEED DIAL
ENTER 1'ST CHAR.
OR
ENTER SPEED NO. [_]
When the specified speed dial has not been programmed, NOT PROGRAMMED appears.
In case of location search, when Group ID has already been registered,
Group ID is displayed in advance of the speed dial locations.
OT25
(Character = B)
**1)
ENTER 1'ST CHAR.:
#10 ABC Group
20>BELGIUM
30 CHINA
ENTER
*1)
OT9
(Character = O)
*2)
OT9(Character = 0)
ENTER 1'ST CHAR.:
160 NEW YORK
150>OSAKA
140 PORTUGAL
ENTER
↓ Key
ENTER 1'ST CHAR.:
150 OSAKA
140>PORTUGAL
170 Poland@faxdata.c_
ENTER
OT70
**3)
□ GERMANY
0387238662
ENTER TO CONFIRM
ENTER
Keypad(1-#)
0273 21 1111_
ENTER TO CONFIRM
ENTER
4A


4A
Email Key
<EMAIL ADDRESS>
ENTER ALPHABET KEY
OR KEYPAD
OT or
KEYPAD
CAPS OFF
k-okitaro@okidata.co
.jp
ENTER TO CONFIRM
ENTER
3A
START
As a result, when only one location is specified by clearing locations, this route is shifted to Instant Dial "2C".
Printing of broadcast locations
ENTER Key
Specification of
multiple locations
BROADCAST CONFIRM
>BY REPORT PRINT
BY DISPLAY
ENTER/→ Key
ENTRY REPORT
PRINTING
End of printing
Document scanning
Delayed transmission
CALLING
Stand By
STOP/← Key
↑ Key
↓ Key
*6)
BROADCAST CONFIRM
BY REPORT PRINT
>BY DISPLAY
ENTER/→ Key
ENTRY LOCATION(S)
20>bel@fax.co.jp
60 france@faxdata.c
70 germany@faxdata.
STOP/← Key
*6)
ENTER
*4)
3A
*3)
CLEAR/
ENTER/
→ Key
□ france@faxdata.co.
jp
PRESS CLEAR TO DEL
ENTER
CLEAR
ENTRY LOCATION(S)
20 bel@fax.co.jp
60>france@faxdata.c
70 germany@faxdata.
□ france@faxdata.co.
jp
*** DELETED ***
DELETE
Only one location is specified
ENTRY LOCATION(S)
60>france@faxdata.c
ENTER
No specified location
NO LOCATION
3A


X1
1>TO
2 CC
3 FROM
SELECT LOCATION(S)
*1) TO:, CC: both are the displays when there are no address locations registered.
START key is disabled.
The change of the resolution and density settings is available at this state.
*1)
1>TO
2 CC
3 FROM
PRESS START TO SEND
↓ Key
↑ Key
1 TO
2>CC
3 FROM
PRESS START TO SEND
2 CC
3>FROM
4 SUBJECT
PRESS START TO SEND
3 FROM
4>SUBJECT
5 SEND FILE FORMAT
PRESS START TO SEND
4 SUBJECT
5>SEND FILE FORMAT
6 SENDER ID(EMAIL)
PRESS START TO SEND
5 SEND FILE FORMAT
6>SENDER ID(EMAIL)
7 RETURN RECEIPT
PRESS START TO SEND
6 SENDER ID(EMAIL)
7>RETURN RECEIPT
8 CONFIRM REPORT
PRESS START TO SEND
ENTER/
→ Key
START
X3A
Memory scanning
X3
1
X4
1
X5
1
X6
1
X1
1
7 RETURN RECEIPT
8>CONFIRM REPORT
9 DISPLAY(TO:)
PRESS START TO SEND
8 CONFIRM REPORT
9>DISPLAY(TO:)
10 DISPLAY(CC:)
PRESS START TO SEND
9 DISPLAY(TO:)
10>DISPLAY(CC:)
11 DISPLAY(FROM:)
PRESS START TO SEND
9 DISPLAY(TO:)
10 DISPLAY(CC:)
11>DISPLAY(FROM:)
PRESS START TO SEND
X7
1
X8
1
X9
1
X10
1



*7) When CC is selected.

```
CC:LOC. ENTRY :***
 SELECT LOCATION(S)
```

*7) When FROM is selected.

```
FROM:LOC.ENTRY
 SELECT LOCATION
```

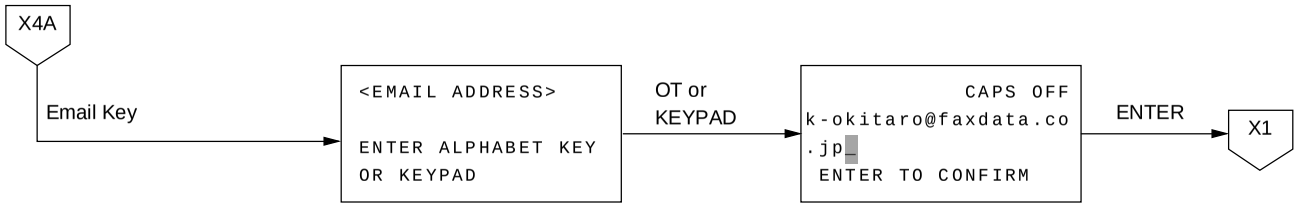
*1) The search will be done for SPEED DIAL(s) registering TEL(s) and EMAIL(s). (The selection of CC: or FROM: is only for EMAIL(s))

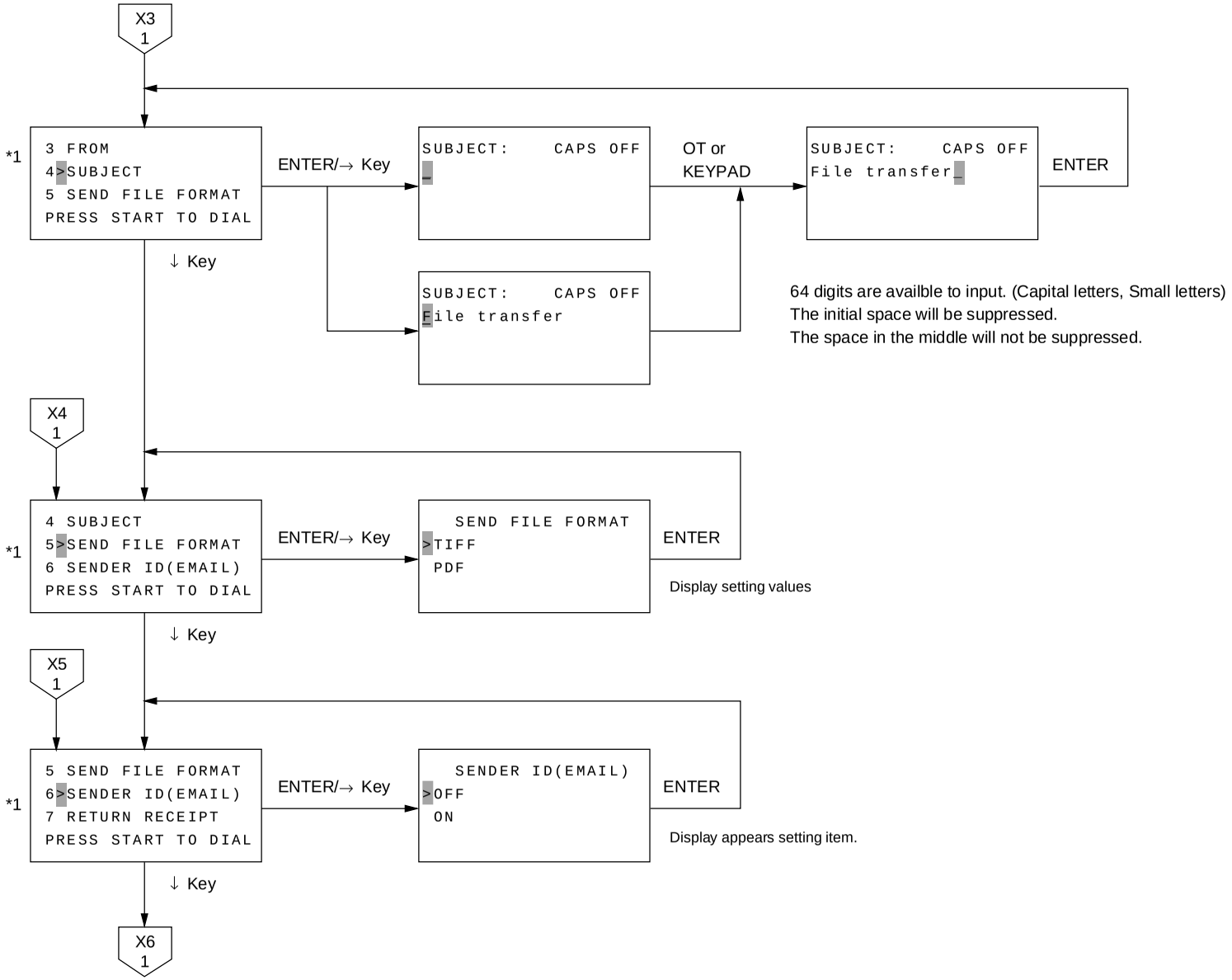
*2) The max. of 59 digits is displayed.

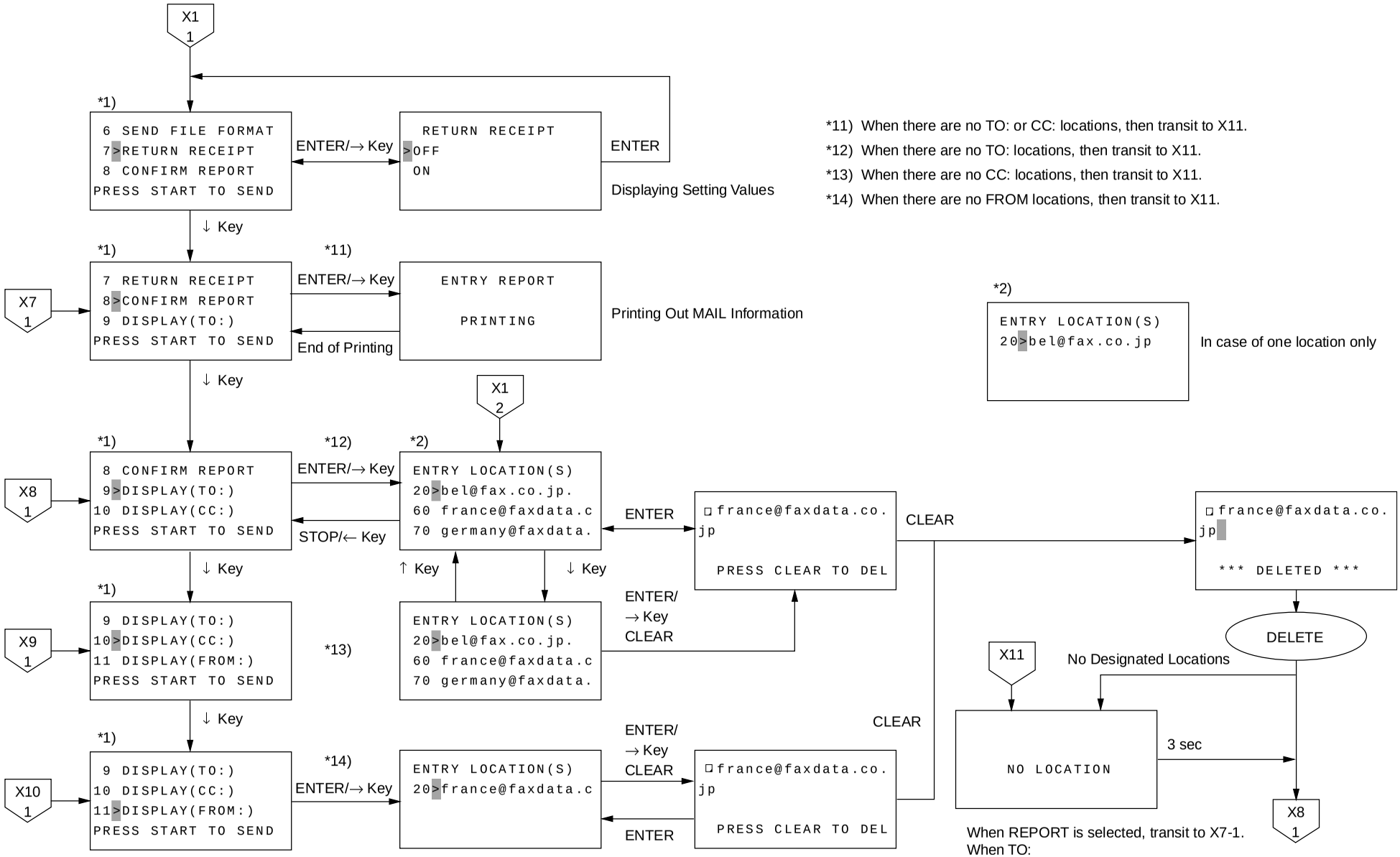
*3) SPEED DIAL registering TEL(s) or EMAIL(s) are possible to select. (When CC: or FROM: is selected, only EMAIL(s) are in the selective choice. If a SPEED DIAL registering TEL(s) is selected, the warning sign will appear.

*5) A group can not be designated when FROM: is selected. When CC: is selected, if a group designated has both TEL(s) and EMAIL(s), then TEL will be registered in TO:. If a group which has only TEL locations is designated, then the warning sign will be displayed.

*7) When FROM: is selected, the selective location is only one.


X4A
Email Key
<EMAIL ADDRESS>
ENTER ALPHABET KEY
OR KEYPAD
OT or
KEYPAD
CAPS OFF
k-okitaro@faxdata.co
.jp
ENTER TO CONFIRM
ENTER
X1


X3
1
*1
3 FROM
4>SUBJECT
5 SEND FILE FORMAT
PRESS START TO DIAL
ENTER/→ Key
SUBJECT: CAPS OFF
_
OT or
KEYPAD
SUBJECT: CAPS OFF
File transfer_
ENTER
↓ Key
SUBJECT: CAPS OFF
File transfer
64 digits are availble to input. (Capital letters, Small letters)
The initial space will be suppressed.
The space in the middle will not be suppressed.
X4
1
*1
4 SUBJECT
5>SEND FILE FORMAT
6 SENDER ID(EMAIL)
PRESS START TO DIAL
ENTER/→ Key
SEND FILE FORMAT
>TIFF
PDF
ENTER
Display setting values
↓ Key
X5
1
*1
5 SEND FILE FORMAT
6>SENDER ID(EMAIL)
7 RETURN RECEIPT
PRESS START TO DIAL
ENTER/→ Key
SENDER ID(EMAIL)
>OFF
ON
ENTER
Display appears setting item.
↓ Key
X6
1


X1
1
*1)
6 SEND FILE FORMAT
7>RETURN RECEIPT
8 CONFIRM REPORT
PRESS START TO SEND
ENTER/→ Key
RETURN RECEIPT
>OFF
ON
ENTER
Displaying Setting Values
↓ Key
*1)
7 RETURN RECEIPT
8>CONFIRM REPORT
9 DISPLAY(TO:)
PRESS START TO SEND
*11)
ENTER/→ Key
ENTRY REPORT
PRINTING
End of Printing
Printing Out MAIL Information
X7
1
↓ Key
X1
2
*1)
8 CONFIRM REPORT
9>DISPLAY(TO:)
10 DISPLAY(CC:)
PRESS START TO SEND
*12)
ENTER/→ Key
STOP/← Key
*2)
ENTRY LOCATION(S)
20>bel@fax.co.jp.
60 france@faxdata.c
70 germany@faxdata.
X8
1
↓ Key
↑ Key
↓ Key
ENTER
□france@faxdata.co.
jp
PRESS CLEAR TO DEL
CLEAR
□france@faxdata.co.
jp
*** DELETED ***
DELETE
*1)
9 DISPLAY(TO:)
10>DISPLAY(CC:)
11 DISPLAY(FROM:)
PRESS START TO SEND
*13)
ENTRY LOCATION(S)
20>bel@fax.co.jp.
60 france@faxdata.c
70 germany@faxdata.
ENTER/
→ Key
CLEAR
X9
1
X11
No Designated Locations
↓ Key
*1)
9 DISPLAY(TO:)
10 DISPLAY(CC:)
11>DISPLAY(FROM:)
PRESS START TO SEND
*14)
ENTER/→ Key
ENTRY LOCATION(S)
20>france@faxdata.c
ENTER/
→ Key
CLEAR
ENTER
□france@faxdata.co.
jp
PRESS CLEAR TO DEL
CLEAR
NO LOCATION
3 sec
X10
1
X8
1
When REPORT is selected, transit to X7-1.
When TO:
*2)
ENTRY LOCATION(S)
20>bel@fax.co.jp
In case of one location only
*11) When there are no TO: or CC: locations, then transit to X11.
*12) When there are no TO: locations, then transit to X11.
*13) When there are no CC: locations, then transit to X11.
*14) When there are no FROM locations, then transit to X11.

4.2.4 Drive Operation of Internet FAX

With the Internet FAX, it is available to register the Sender ID (Email) On/Off, Return Receipt On/Off and to switch TIFF/PDF of the File Format on the Speed Dial communication parameter. When the communication is using the Speed Dial, then the communication parameter settings have priority to the user settings. When the broadcasting is done, however, the communication parameters are invalid and the user setting values are valid. And also with the Email key, it is available to switch the Sender ID (Email) On/Off, Return Receipt On/Off and also to switch Ftiff/PDF of the File Format. If the setting is done by this drive operation then the values set by this operation become valid.

And also, the default of the Subject is Internet FAX Message, but it is available to enter the individual Subjects with the drive operation by the Email key.

And over and above, it is available to specify To:, CC: categorized for the sending locations by the Email key. And also the addresses to fill in the From: can be specified by every communication.

4.2.5 Tiff/PDF

InternetFAX converts scanned documents into a single TIFF and PDF-format file and send it by email. This machine can transmit at a resolution of 200 × 100dpi in STD mode, 200 × 200dpi in FINE mode, 300 × 300dpi or 600 × 600dpi in EX-FINE (*1) and 200 × 200dpi in PHOTO mode. The images are compressed using one of the standard formats used on faxes: MH, MR or MMR (*2).
Many InternetFAX products offered by other manufacturers can receive only in the STD and FINE resolutions and in MH compression mode. Please note this point if you are sending a document to an InternetFAX of a different make, but this will not be a problem if you are sending it to the same InternetFAX machine as yours or to a PC. This InternetFAX attaches the mail text (See 4.2.6) as it sends a fax document.

(*1)(*2): These settings can be changed.

4.2.6 Fixed TEXT message attached to the Sending Internet FAX

When the Internet FAX is sent, the fixed message shown below is sent.
The contents differ between the case when Tiff is sent and when PDF is sent.
And also, when the setting of the Sender ID (email) is On and the Sender ID is already registered, then ‘from The Internet Facsimile’ becomes ‘from [Sender ID]’.

With the SEND NOTIFICATION of the user settings, it is possible to set so that not sending this fixed message.

<When TIFF is sent>
There are scanned pages attached to this e-mail that have been sent from ([sender ID] or an Internet Facsimile.)
To view or print these pages please use the software program "Imaging" provided with WindowsNT4.0/Windows95 (OSR 2)/Windows98/WindowsMe/Windows2000.

Imaging, WindowsNT4.0, Windows95 (OSR 2), Windows98, WindowsMe, Windows2000 are registered trademarks of US Microsoft Corporation.

<When PDF is sent>
There are scanned pages attached to this e-mail which have been sent from ([Sender ID] or an Internet Facsimile.)

4.2.7 Subject

With using the Email key, it becomes available to enter the Subject individually.
And also, when the setting of the Sender ID (email) is On and a Sender ID is registered and the Subject is not entered at the drive operation, then:

the Subject of the sending mail of the Internet FAX is sent as ‘Internet FAX Message from [Sender ID] style.

4.2.8 To:, CC:

With using the Email key, it is available to categorize To:, CC: for the sending locations.

4.2.9 From:

With using the Email key, it is available to specify address individually into the Email Header From: address. The default is the Email address of its own machine.

4.2.10 Tiff Viewer

In order to view Tiff files sent by this machine, it is necessary to have a Tiff Viewer installed on the PC. Microsoft Windows95, 98, NT4.0 and 2000 have a viewer called Imaging, through which you can view tiff files.

Note: Before printing a tiff file from Imaging, go to OPTIONS in either the Print screen or in Properties and set the Print format to “Fit to Page”. If it is set at “Actual size”, part of the fax image may be cut off from the print out.

4.2.11 PDF

It is available to see the PDF being sent by the Internet FAX with Acrobat Reader 3, 4 or 5.

Note: PDF can not be received by the Internet Fax.

4.3 Internet Fax Reception

This machine automatically connects to the server to receive mail according to the POP INTERVAL TIME setting. If there is mail on the server, reception will start automatically. If there is more than one mail message, it will receive all the messages and print them out. However, if the TEXT PRINT setting is ON, it will receive only one message in each reception. You can also receive mail manually; to do this, select MENU + 6: Internet Fax + 2: INTERNET RX and press Enter + Start. If automatic reception takes place and there is no mail, no record of the transaction will be made. In the case of manual reception, service code F941 will be recorded if there is no mail.

Note:
- *InternetFAX receives mail in memory; please check to make sure that there is a sufficient free memory space to receive fax messages. If there is not, reception may be terminated part way through. The installation of an add-on memory is recommended if you have not yet done so.*
- *If the TEXT PRINT setting is ON, you will not be able to receive InternetFAX while a print alarm (e.g., no paper, cover open, paper jam) is on.*

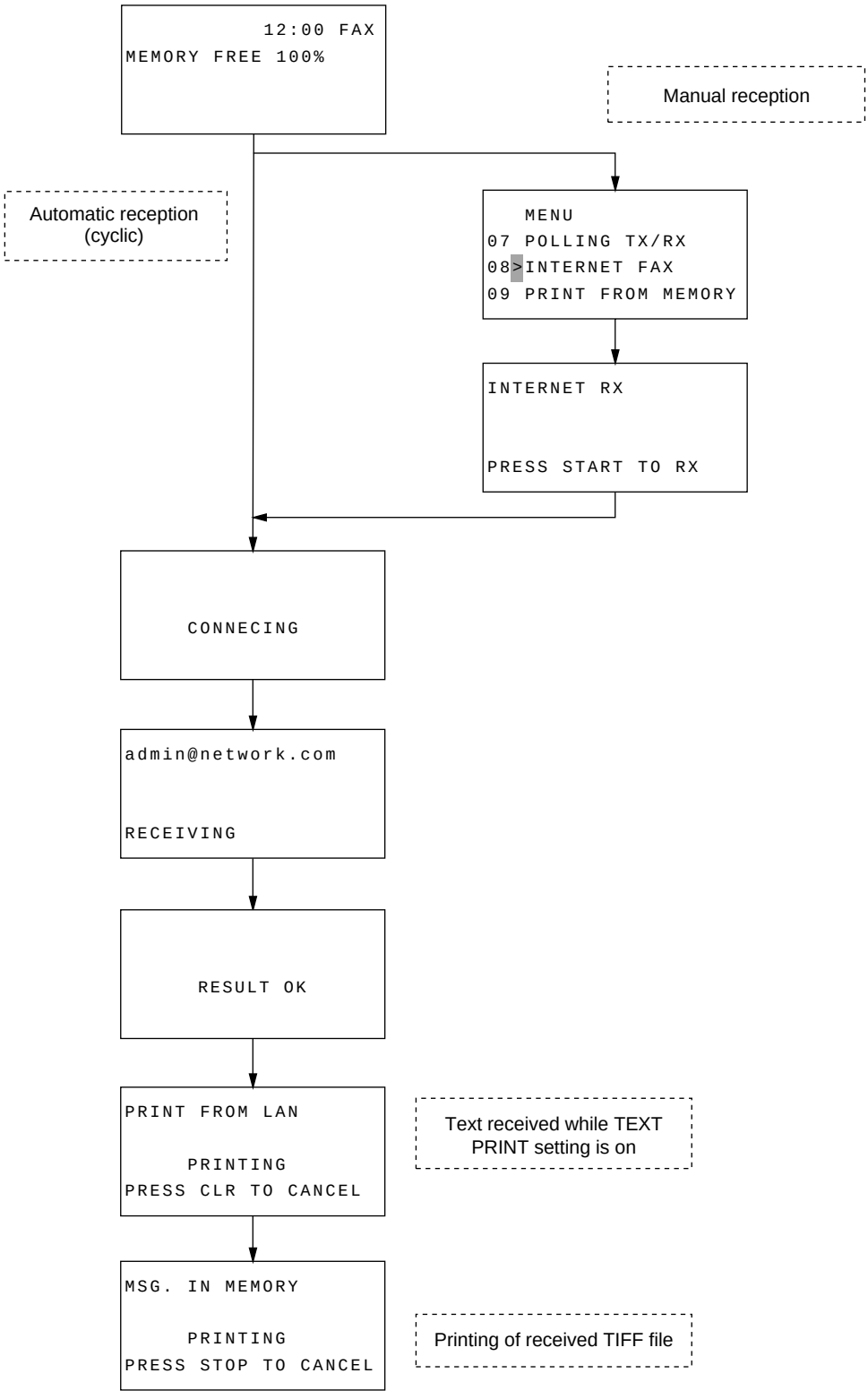


Fig.J-3 InternetFAX reception flowchart

4.3.1 Receiving Tiff file

This machine receives mail messages with Tiff-format attachments in the mail server and prints out the attached files. This machine can print out Tiff files in the Simple Mode defined in ITU-T T.37. It can also receive files at the 300 × 300dpi, 600 × 600dpi or 200 × 400dpi resolution when expanded, and files in MR or MMR compression mode. It cannot print out files of any other Tiff-formats, and if it receives such as file, a communication error will occur and an error report will be printed.

Note: Files at 600 × 600dpi resolution cannot be received without an optional 8M memory installed.

Note: The Tiffs available to be received by the Internet FAX are the Tiff Profile-S and the followings.

a. The ones with the resolution of 200x400, 300x300, 600x600.
b. Tiffs made by Imaging of Microsoft.
(However the ones other than that the encoding style is CCITT Group3(1d) FAX, that the manuscript main scan bit value is more or less than the one stated by the T.4, can not be received.)

Note: The ones available to be received by the Internet FAX are the Emails that contain Tiff or TEXT, but if the MIME format is like followings, then they can not be received.

a. The ones with the attached Tiffs that are using Encoding style other than Base64.
b. The ones with the mail TEXT encoded.
*c. The ones with the Tiff Content-type other than the image/Tiff (the format stated in the Internet FAX) and the application/octet-stream (Note*a).*

When a mail is sent from the mailer to the Internet FAX, please specify the encoding style of the MINE to the Base 64.

*Note*a: MS Outlook2000 sends TIFF files using the format of the Content-Type : application/octet-stream. This format is used also when the TEXT from the Lotus Notes is attached to the sending mail.*
Thus, it supports the Content Type of this style.
Also, in case of Content-Type : application/octet-stream, both types of attachment and inline format of the Content-disposition can be received, and it refers the file name existing there.
If the extension of the file name is ".txt" or ".tif"(".tiff") then each will be printed out.
Other extension files will not be printed out.
Note: In case when the TEXT format is encoded by another format like Base64 and the like, then it will not be decoded and will be printed out as it is.

4.3.2 Receiving text

You can print out the body text of email by turning the TEXT PRINT setting ON. Email from an Internet FAX often comes with added messages (text) before and after the Tiff file, and this function can be used to print these messages out. Fig.J-3 shows the characters that can be printed out by this machine. To print out the information in the mail header, set TEXT PRINT at ON. This machine can print only plain-format text that has not been encoded by Base64 etc. Please note that it may not be able to print out messages from an email client or with text-file attachments, or printouts may be garbled.

4.4 RETURN RECEIPT (Sending Confirmation)

When an Email is received, when there is a Return Receipt confirmation request on the mail header, then a Return Receipt will be sent to the requester. The supported Return Receipt formats on the mail header are following two.

a. MDN format of RFC
   Disposition-Notification-To:admin@fax.co.jp
b. Microsoft Outlook format
   Return-Receipt-To:admin@fax.co.jp

Also, even when there is no Return Receipt request from the other side, if the received mail is error and the setting of the Error MCF Report is On, then the Return Receipt will be sent back to the sender.

The supportive formats of the return receipt are 2 kinds, that are MDN format of RFC and the Plain Text. (These can be selected at the user settings.)

Note: When the Return Receipt confirmation of the MDN format is sent to the mail client who can not translate the MDN format, then there is a possibility that the portion of the mail cannot be translated and the portion is attached as another file. And also, with a mail client who is supporting the MDN format, when the MDN format mail is received, they can have the function that the mail is automatically transfer to the sending box and the like.
The default of this setting of this Internet fax is the TEXT format.

4.4.1 Format of Return Receipt

4.4.1.1 When it is received normally

4.4.1.1.1 TEXT Format

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(processed*1)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:text/plain

RETURN RECEIPT
Your message was displayed on the recipient's machine.

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>
Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail Detail is mentioned later)

(*1) See 4.4.2, details of format

4.4.1.1.2 MDN Format (based on RFC)

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(processed*1)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:multipart/report;report-type=disposition-notification;
boundary="/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/"

—/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
RETURN RECEIPT

Your message was displayed on the recipient's machine.

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>
Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail detail is mentioned later)

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
Content-type:message/disposition-notification

Final-Recipient field:rfc822;<send@fax.co.jp> (address of the final recipient)
Original-Message-ID:<200009261138001@fax.co.jp> (message-ID of sending document)
Disposition:automatic-action/MDN-sent-automatically;processed *2

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/

(*1) (*2) See 4.4.2, details of format

4.4.1.2 When the file format not available is received (when the communication error service code is F931 or F932)

4.4.1.2.1 TEXT format

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(failed)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:text/plain

ERROR RECEIPT
ERROR CODE: FXXX

We can't receive this file.
Please change this file to "TIFF file of InternetFax (T.37) format".
If you have any questions, please tell your receiver.

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>

Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail Detail is mentioned later)

4.4.1.2.2 MDN Format (based on RFC)

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(failed)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:multipart/report;report-type=disposition-notification;
boundary="/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/"

—/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
ERROR REPORT

ERROR CODE: FXXX

We can't receive this file.
Please change this file to "TIFF file of InternetFax (T.37) format".
If you have any questions, please tell your receiver.

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>
Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail detail is mentioned later)

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
Content-type:message/disposition-notification

Final-Recipient field:rfc822;<send@fax.co.jp> (address of the final recipient)
Original-Message-ID:<200009261138001@fax.co.jp> (message-ID of sending document)
Disposition:automatic-action/MDN-sent-automatically;failed

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/

4.4.1.3 When the other error occurred

4.4.1.3.1 TEXT format

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(failed)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:text/plain

ERROR RECEIPT
ERROR CODE: FXXX

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>
Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail Detail is mentioned later)

4.4.1.3.2 MDN Format (based on RFC)

Date: Thu, 28 Sep 2000 11:38:27 +0000
From:(1 space)<send@fax.co.jp>
To:(1 space)<reciept@fax.co.jp>
Subject:RETURN RECEIPT(failed)-<Subject>(subject of received mail)
Message-ID:<200009281138001@fax.co.jp>
Mime-Version:1.0
Content-Type:multipart/report;report-type=disposition-notification;
boundary="/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/"

—/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
ERROR REPORT

ERROR CODE: FXXX

<one vacant row>
=======ORIGINAL MESSAGE========
<one vacant row>
Date:<Date>(date of the received mail)
From:<Sender E-mail address>
To:<Receiver E-mail address>
Subject:<Subject>(subject of received mail)

<Message Body>(message body of received mail detail is mentioned later)

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/
Content-type:message/disposition-notification

Final-Recipient field:rfc822;<send@fax.co.jp> (address of the final recipient)
Original-Message-ID:<200009261138001@fax.co.jp> (message-ID of sending document)
Disposition:automatic-action/MDN-sent-automatically;failed

/_/_/_/_/_/_Internet_Fax_/_/_/_/_/_/

4.4.2 Details of format

4.4.2.1 Subject

The format should be :
Return Receipt (Disposition-type)-<Subject>(subject of received mail)

4.4.2.2 Dispostion-type

The displays of the Subject row and main body (MDN format portion) should meet each other.

When it is received normally by the Internet FAX : processed
When a file that can not be displayed is attached : failed
When the error is by GW SERVICE : failed

4.4.2.3 About Message Body of received mail

The Message Body of the received mail (Mail body TEXT) will be attached to the RETURN RECEIPT. 100 rows from the top of the TEXT body of the original mail (received mail) will be attached on the RETURN RECEIPT.
If there aren't any mail body then nothing will be attached. (The portion will be vacant.)
According to the mailer, some vacant rows may be attached, then this case, up to the 100th row including those vacant rows will be attached.
The attached TEXT file will not be attached to the Message Body.

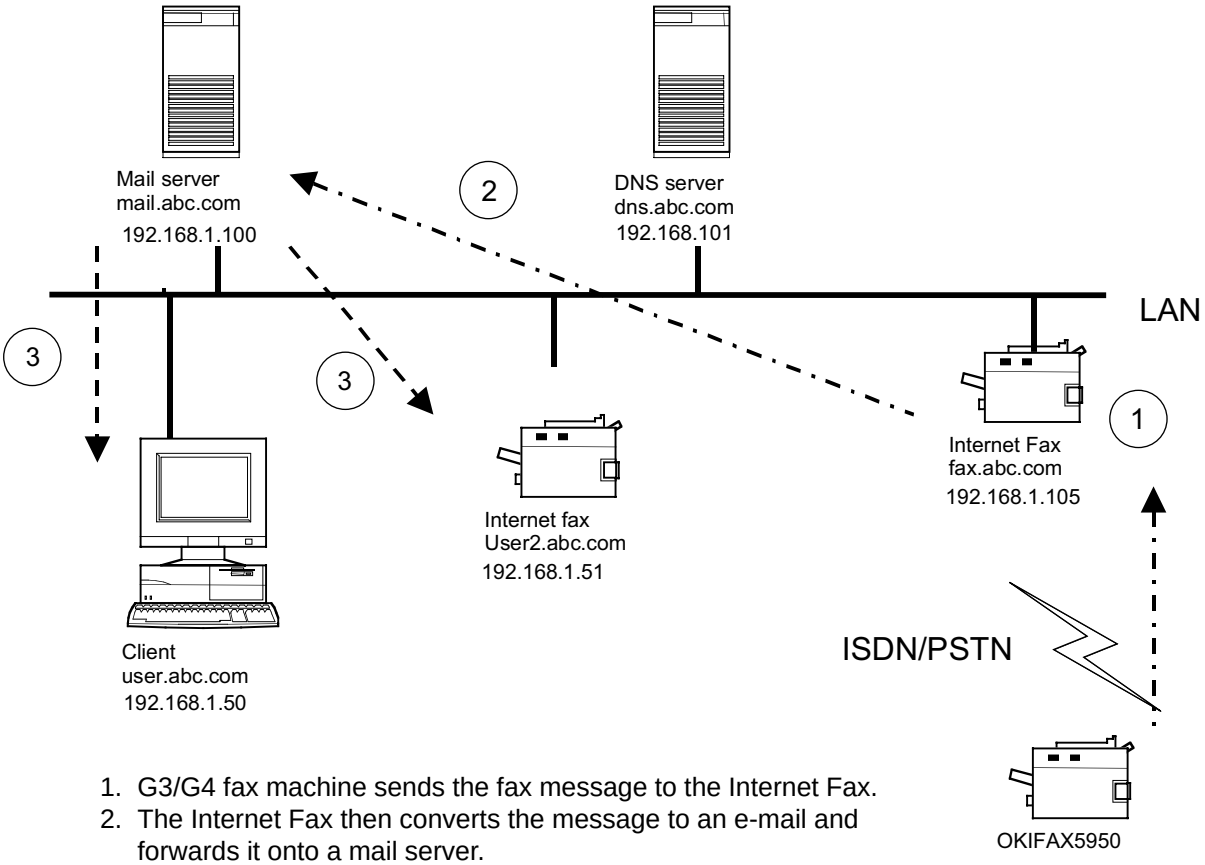
4.4.2.4 Original-Message Header Indication Details

Date:	The original contents are copied.
From:	The original contents are copied. (Those of 64 bytes at max. are printed.) If the original message does not have the "From" field, only the title (From :) is indicated.
To:, CC:	The original contents are copied. (Those of 200 bytes at max. are printed.) If the original message does not include the destination information, anything as well as the titles (To:, CC:) are not indicated.
BBC:	Not indicated.
Subject:	The original contents are copied. (Those of 64 bytes at max. are printed.)

4.5 Gateway Services

4.5.1 Fax to Email

You can forward incoming FAX data as email. To do this, register on a PERSONAL BOX a one-touch number onto which an email address has been assigned. Any fax image that has been sent to this box will be forwarded to the assigned email address upon reception. For details of the forwarding operation, please see the fax machine manual under the section concerning fax forwarding (relay).



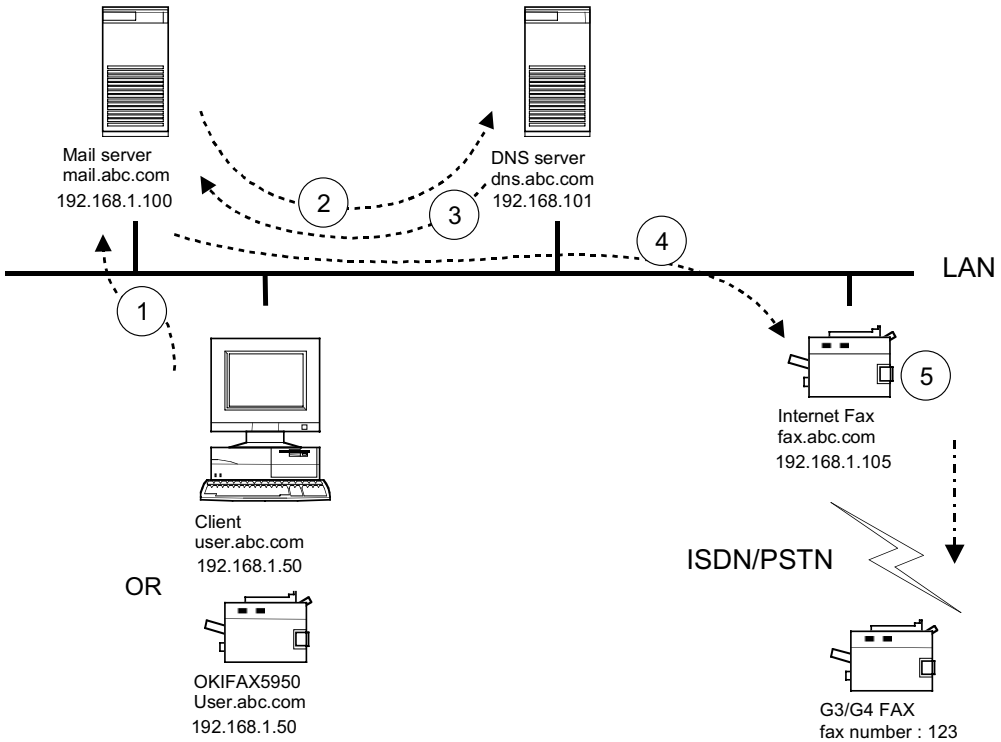
1. G3/G4 fax machine sends the fax message to the Internet Fax.
2. The Internet Fax then converts the message to an e-mail and forwards it onto a mail server.
3. The mail server the sends the e-mail onto a computer or another Internet Fax,

Fig.J-4 Gateway Service (G3/G4 Fax → Email)

4.5.2 Email To Fax (SMTP Style)

Images received by email can be forwarded by fax. This InternetFAX carries out this operation using SMTP reception; this function is supported for POP, too. (For the detail, see 4.5.3) Indicate the forwarding number to the InternetFAX using the format FAX=Phone Number@abc.com, and the InternetFAX will forward the received Tiff file to the number given after “FAX=” by normal fax transmission. You can only forward Tiff files which this InternetFAX can receive; files in formats not supported by this machine or text files cannot be forwarded. The telephone number to which the file is to be forwarded must be entered using numbers 0-9 and letters *, #, -, P and +. If you enter anything else, the machine will refuse to receive the message. The telephone number must not be more than 40 digits long. You can make a broadcast transmission to up to 10 recipients by specifying each telephone number in the above mail address format. The exact mail address format required for mail-to-fax forwarding varies from one network to another; please consult your network administrator about the correct format. For example, if the host name of this InternetFAX has been defined as “intfax” and its domain name is “network.com”, enter FAX=[telephone number]@intfax.network.com, and the mail server will transfer this mail address to the InternetFAX for forwarding. It is also possible for an email client to communicate directly with this machine. To do this, specify the IP address of this InternetFAX instead of the email client’s SMTP server address. Specify a recipient using the above address format and attach a tiff file in a format supported by this InternetFAX, and you can have the Tiff file forwarded by fax on reception. Please note that it may not be possible to establish a connection between this Internet fax and some types of email clients. To use this function, you must register domain names from which data may be received for fax forwarding. This is in order to stop people accessing the email forwarding function freely. You can register 5 domain names, each up to 64 characters long. Register the names of domains from which you wish to allow data to be sent for forwarding. The data will be accepted by the fax machine only if the sender’s domain name matches one of the pre-specified domains, or if it is a sub-domain of a pre-specified domain.

Note: See Appendix B for information on mail routing.

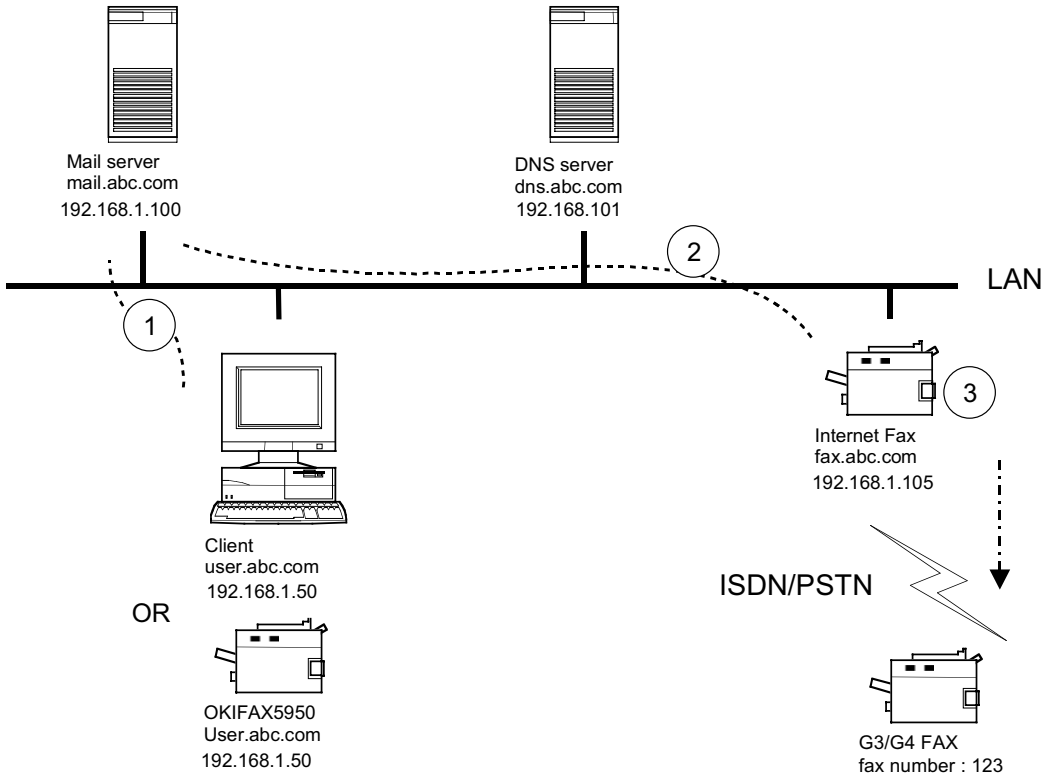


1. The client sends a message to the mail server using the address format FAX=123@fax.abc.com. A client can be a computer or an Internet Fax.
2. The mail server makes an enquiry to the DNS server about fax.abc.com.
3. The DNS server replies to the mail server with the IP address of fax.abc.com.
4. The mail server forwards the message onto the Internet Fax.
5. The Internet Fax then forwards the message onto a G3/G4 fax machine with the telephone number of 123.

Fig.J-5 Gateway Service (Email → G3/G4 Fax)

4.5.3 E-mail to Fax (POP Style)

Using Subject (POP GATEWAY SUBJECT) for forwarding and the Password (POP GATEWAY PWD) installed in the relay machine beforehand, when receiving is done by POP, it judges the Subject, then if it meet with the one registered before, the attached TIFF, TEXT will be relay transmitted.



1. The client sends an Email to the mail server in the format specified for Gateway Service.
2. InternetFAX receives the mail form the mail server.
3. If the received mail is in the format specified for Gateway Service, your InternetFAX sends the attached Tiff and Text files to the G3/G4 FAX at the forwarding FAX numbers specified in the mail.

Fig.J-6 Gateway Service by POP (Email → G3/G4 Fax)

4.5.3.1 “POP GATEWAY SUBJECT”, “POP GATEWAY PASSWORD”

POP GATEWAY SUBJECT : This is the subject for judgment to make the relaying action done. When the characters registered here are found in the subject, the relaying process will be done.

POP GATEWAY PWD : This is the password for certification to do the relaying action. Even if the POP GW SUBJECT is correct but the Password does not meet, then the forwarding action will not be accepted.

The maximum digit number of “POP GW SUBJECT” “POP GW PWD” is 20.
The front space is inhibited.
The space in the middle is available.
There is no distinction of Capital letters and Small letters when the Subject judgment is done.
Both POP GW SUBJECT and POP GW PWD are necessary. (Relaying will not be done if either one of them is missing.)

4.5.3.2 Style of Subject when a relay is requested.

When the "POP GW SUBJECT" is registered as “FORWARD”, and "POP GW PWD" is registered as “INTERNET”, then you may enter as
Subject:FORWARD:INTERNET=0355556666&03344447777
The following part after = is the TEL No. to be forwarded.

- Specification of TEL No. is Max.10
  At the point when the forwarding request is received, in case the other communication is already using the individual location, and by comparing to the rest of vacant individual locations and if all the specified locations can not be forwarded, then it will become a communication error.
  e.g. : When 18 individual locations are used as the time specified communications, the maximum number of individual location area is 19, so if the specified locations are more than one then it will become error this case. (If the specified location is one then the communication is available.)
  In case when it is specified as Subject : FORWARD : INTERNET = Tel No. 1 & Tel No. 2 & ... then it becomes error and the error report will be returned. Error Code is F951.

- In case when more than one location is specified, each Tel No. should be connected with “&”.

- The forwarding request of more than 10 locations at one time becomes error, and the transmission will not be done.
  The error is reported. Error code is F952.

- Other characters than numerical letters (0-9), ‘-(hyphen)’, ‘<SP>(space)’, ‘+(plus)’, ‘#(sharp)’, ‘*(asterisk)’, ‘P(pause)(the small letter p is converted to capital letter P)’, ‘,(comma)’ are prohibited to be specified. If they are received then they will become error.

- The calling action of -(hyphen)’, ‘+(plus)’, ‘#(sharp)’, ‘*(asterisk)’, ‘P(pause)(the small letter p is converted to capital letter P)’, will follow the specification of the calling.

- ‘<SP>(space)’, ‘,(comma)’ are eliminated during calling. (They are eliminated when they are saved as calling data.)
  0P27+3,2<SP>7*1-11#1 reads 0p27+327*1-11#1.

- The maximum digit number of one Tel. No. is 40.

4.5.3.3 Judgment Style of Relay Forwarding Specified Subject

4.5.3.3.1 Available Characters for Subject

As for receiving, any codes can be received. (None of the codes received will become an error.)
The available characters entered by operation are numerical letters(0-9), alphabets(A-Z,a-z), SP and signs(!#&'()*+,-./:;=?@\"_%~). So the confirmation comparison is done with these characters.
ASCII characters(00-7F) are allowed for RFC.

4.5.3.3.2 Criteria

The judgment if it is the POP GW SERVICE or normal receiving, and if it is an error or a normal request receiving is as followings.

1. POP GW SUBJECT does not meet → Normal Receiving (It will not be regarded as POP GW SERVICE.)
2. POP GW SUJECT meets and also there is ":" colons.
   2.1 POP GW PWD does not meet → Password Error (Service code: F954)
   2.2 POP GW PWD meets and also there is "="(equal) → GW will be requested.(Normal)
   2.3 POP GW PWD meets but there is no "="(equal) → Subject Write Format Error (Service code: F953)
3. POP GW SUBJECT meets but there is no ":"colons.
   3.1 POP GW PWD does not meet → Normal Receiving (It will not be regarded as POP GW SERVICE.)
   3.2 POP GW PWD does not meet → Subject Write Format Error (Service code: F953)

[Note] GW is the abbreviation for Gateway.

4.5.3.4 Error Processing

4.5.3.4.1 In case of address specification invalid error, because the receiving machine side is using the individual address

At the point when the forwarding request is received, if the individual location is already used by the other communication, or all the specified locations can not be forwarded (when the vacant number is not enough), then it will be a communication error.
Error code F951
An error report will be returned.

4.5.3.4.2 In case of Specified Location Number Over Error]

The maximum number of locations specified in one relay requested transmission is 10.
When the number of addresses which is specified in the relay requested transmission is more than 10, then it becomes communication error.
Error code F952
An error report will be returned.

4.5.3.4.3 In case of Subject Recorded Style Error]

(Subject is the title of mails sent on the Internet.)
When there is a description like followings, the forwarding will not be done.
Error code F953
An error report will be returned.

(When it is registered as POP GW SUBJECT = FWD POP GW PWD = MLK.)

1. FWD:MLK= (No specified Tel. Numbers)
2. FWDMLK= (No : between POP GW SUBJECT and POP GW PWD)

The top spaces of any number will be ignored
<SP>FWD:MLK=Tel. No.&... will be recognized as no <SP>.

Other than above, the space not registered in POP GW SUBJECT is invalid. (It will not regarded as POP GATEWAY SERVICE)
When the "POP GW SUBJECT" is registered as "FWD", and "POP GW PWD" is registered as "MLK" then,

F<SP>WD:MLK=Tel. No.&...
FW<SP>D:MLK=Tel. No.&...
FWD<SP>:MLK=Tel. No.&...
are not regarded as POP GATEWAY SERVICE.
When the registered “POP GATEWAY SUBJECT” is “F<SP>WD” or “FW<SP>D”, and then each registered space portion becomes valid. (Transit to POP GATEWAY SERVICE.)

Also, it is allowed to shift rows in the subject.

4.5.3.4.4 In case of Password Error]

A password mistake or a forwarding request without password will not be received.
Entering ‘Unregistered <SP>(s)’ are all errors.
In case of POP GW PWD = MLK
<SP>MLK=..., M<SP>LK=..., ML<SP>K=..., MLK<SP>=...are all Password Errors.
Error code F954
An error report will be returned.

4.5.3.4.5 In case of Wrong Tel. No. Error]

1. When the prohibited characters are used in the Tel No.
2. When the digit number of Tel. No. is more than 40.

Error code F955
An error report will be returned.

[In case of Memory Full Error]
In case when the transmission is not available, because the image of the forwarding requested communication is memory full.
Error code is F940 like the normal POP receiving.
An error report will be returned.

4.5.3.5 Error Notification Style

- When an error occurred with POP Gateway Service, an error report will be sent back.
- The format of the error report is the same to the normal Return Receipt (MDN). (Two kinds that are TEXT format and MDN format which is based on the RFC.)
- When there are Norwegian or Umlaut characters in the return report, then these characters are converted to spaces.
- In case of an error, this adds “GATEWAY SERVICE ERROR” comment on the RETURN RECEIPT (MDN)

The Error Notification Style is shown below.

[In case of TEXT format]

```
*** ERROR REPORT ***

GATEWAY SERVICE ERROR
ERROR CODE:    FXXX

==============ORIGINAL MESSAGE==========

Date: Tue, 26 Sep 2000 11:38:27 +0000
From: send@fax.co.jp
To: reciept@fax.co.jp
Subject : next meeting

Next meeting will be on Wednesday.
```

[In case of MDN format]

```
*** ERROR REPORT ***

GATEWAY SERVICE ERROR
ERROR CODE:    FXXX

==============ORIGINAL MESSAGE==========

Date: Tue, 26 Sep 2000 11:38:27 +0000
From: send@fax.co.jp
To: reciept@fax.co.jp
Subject : next meeting

Next meeting will be on Wednesday.

Final-Recipient field: rfc822;<send@fax.co.jp>
Original-Message-ID: <200009261138001@fax.co.jp>
Disposition: automatic-action/MDN-sent-automatically; failed
```

4.5.4 Relay Return Receipt (Gateway Service)

The report is done using both POP Gateway Service and SMTP Gateway Service.

When the machine which is requested the relaying does transmission to the each terminals, the report of the transition result to the each terminals is sent to the machine which has done the relay transmission (relay transmission requester). (The transmission result from children to grandchildren is returned to the parent.)

When there is a Return Receipt (MDN) request from the relay requester, it will be returned from the relay station to the relay requester.

Even when there is no Return Receipt request from the relay requester, in case of the error of the transmission to the terminal*, the transmission will be done (from the relay station to relay requester).

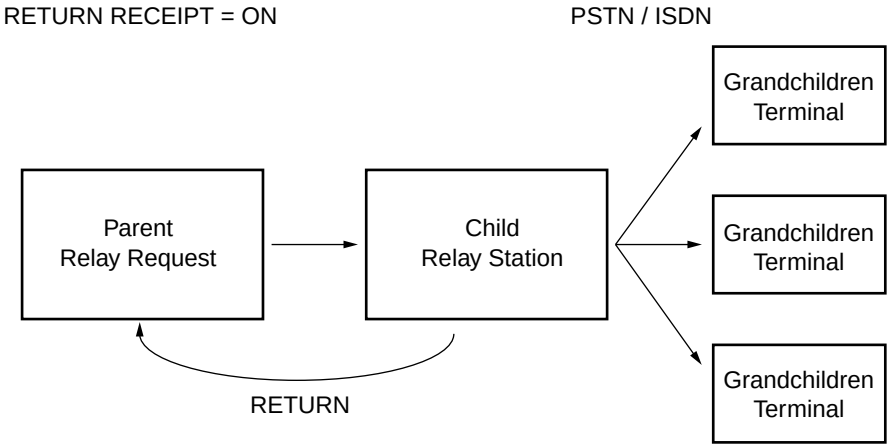


Fig.J-7 : Relay Action Concept

[Transmission Condition]

- When there is a Return Receipt (MDN) request from the relay requester, the relay return report will be sent.
  (When the transmission to the relay station is done normally, a Return Receipt will be sent, and when the transmission to the terminals are completed, a Relay Return Receipt will be sent.)
- Even when there is no Return Receipt (MDN) request from the relay requester, in case of the error of transmission to the terminals* (from relay stations to the relay requester), the report will be returned.
- Not regarding to if there is a Return Receipt request (MDN) from the relay requester or not, in case when the relay station cancels the transmission by the STOP key (Canceling during the transmission or canceling during re-dial waiting), the Relay Return Receipt will be not sent.
- Restriction during the transmission is the same to G3/G4.
- The returning report transmission is treated with the feeder transmission. The feeding will not be done with entering the next manuscript. (During the transmission, the next communication is prohibited.)
- When the Email address is more than 64bytes, then the return report will not be transmitted.
- When there are Norwegian or Umlaut characters in the return reports, then these characters are converted to the spaces.

* Even when the location is only one, if there is a transmission error (other than service code 0000), it is regarded as an error of transmission to the terminals and a relay return report will be sent.

[Report Style]
The report style is the same to the case of G3/G4 communication.
The return report is sent with MIME (text/plain) style.

7.5.5 TEXT Relay Forwarding Function

TIFFs received as Emails are forwarded by the FAX. That case, the TEXT portion (attached TEXT file, mail body TEXT) can be forwarded if the setup is done.

[TEXT Forwarding Specifications]
- One row will be 98 letters.
- One page will be 59 rows.
- The page shift code will be transferred to the row shift code and the data will be processed in compressed style.
- When a file of an unreceivable style like BMP File is sent together with the TEXT (file or mail main body), then the forwarding will not be done. Tiff+BMP File+Text or BMP File+Text+Tiff or Text+BMP File ... will not be forwarded.

- When both attached TEXT file and Mail Main body TEXT are sent, then they will be sent / printed together continuously with the separation line inserted in between.(The Network printing process is that they are printed together continuously inserting vacant rows.)
- The separation line is 98 [-] (hyphen). However, the number of hyphens may be fewer than 98 depending on a received mail.
- When TEXT Forwarding is set OFF, if the TEXT only GATEWAY SERVICE request is made in the POP/SMTP GATEWAY SERVICE operation, F002/E002 will be set as the service code, and if the RETURN-RECEIPT request is made, the Return Receipt will be sent back. With no request, the operation ends normally without any return operation.
- When TEXT Forwarding is set ON, if TEXT only GATEWAY SERVICE request is made, the operation ends normally and F001/E001 will be set as the service code.
- When a mail has completely blank main body field but has an attached TEXT file, the main body field is deleted and the separation line between the message body and the attached file is not printed, either.
- The main body TEXT of the mail which was sent by the HTML format will be forwarded only content-type:text/plain portion and the HTML portion will be eliminated.
  Note: In case of a HTML-format mail prepared with the Microsoft Outlook, the identical contents are written in both TEXT format and HTML format.

- The constraint is that, when multiple files are attached in the HTML format (e.g., main body + TEXT (attached), main body + TIFF), if the MIME format is set as multipart/mixed and multipart/alternative, the contents in HTML format are forwarded as they are because the multipart/alternative contents cannot be analyzed.
  The same happens in TEXT printing.

[Relay Forwarding TEXT Capacity Restriction]
When the forwarding is carried out, the max. capacity of forwarding TEXT is 8KB of the received TEXT. The TEXT having more than 8KB is forwarded up to 8KB and the rest will be discarded without any error notice.

[Text Forwarding Process]
- If a relay request (Gateway Service) is received normally, at the point when the forwarding transmission becomes available, there is “WAIT A MOMENT” display on the LCD. On the other hand, TEXT data is encoded and connected to the top of the FLC.
  After that, the relay action is the same to G3/G4 forwarding transmission.
- The encoding style is always MMR. The resolution level is 200x200dpi.
- There is no support for 2 byte characters.
  When the 2 byte characters are sent, they will be forwarded after garbled.
- 1 byte supported characters (Norwegian, etc.) will be converted to spaces.
- The forwarding action is carried out only when the state is during waiting.
- During “WAIT A MOMENT”, the operation is prohibited. Sending/Receiving are prohibited.
- During receiving, if a full-memory occurs when TEXT portion is forwarded to the picture block, then the communication will be cut because of the full-memory.
  Error code is F940.
- After receiving of a forwarded picture, if full-memory occurs before or during conversion of the picture from TEXT portion, then only the TIFF portion will be forwarded (no error display).
  When there is no TIFF (only TEXT) then it becomes error and it will be displayed on the activity report.

4.6 Network Scanner

This machine can be used as a network scanner. Use it as if sending an InternetFAX, specifying the email address to which the scanned document should be sent as the recipient of the transmission, and you can receive the document on your PC as a Tiff file. In this case there is no limit to the resolution of the Tiff file, so you can send the image at 600 × 600dpi (in EX-FINE mode*[1]) to create a high-quality scanned image file. When using this machine as a scanner, set **UF90: SENDER ID(Email)** at OFF so that the sender ID will not be added at the top of the document.

(*[1]) You can change the resolution between 300 and 600dpi though setting UF89: EX.FINE MODE.

4.7 Troubleshooting

4.7.1 Service codes

If a communication error occurs, check the service code shown on the Activity Report.

SMTP communications:
The service code for an SMTP communication is prefixed with the letter E, followed by a three-digit SMTP error code defined by RFC. Numbers from 900 and higher are codes defined specifically for this InternetFAX.

- 001: Text print
- 002: Text received but not printed

- 900: Network Card I/F error
- 910: TCP/IP or SMTP/POP not supported or allowed by Network Card
- 920: Network Card not ready; transmission request received while Network Card is initialising (redial)
- 930: No rmatch for domain received; invalid user name
- 931: Email cannot be received (invalid TIFF)
- 932: Email cannot be received (other than invalid TIFF)
- 940: Memory full
- 942: Command time-out
- 950: Server communication error
- 951: Address is not available to be specified, because that SMTP GATEWAY receiving machine side is using the individual address.
- 952: SMTP GATEWAY Locations Specified Number is over.
- 953: No Specification of SMTP GATEWAY Tel No.
- 955: SMTP GATEWAY Wrong Tel No. Error
- 956: TEXT Forwarding Error
- 957: During SMTP GATEWAY SMTP Receiving, No “FAX=” Error
- F00: Mupis Command Transmission Failed or Response against Command is Invalid.
- F02: End of Maintenance Request Receiving Defective
- 980: NIC ABORT (When Stop Instruction came from NIC)
- 990: Transmission Error between Server

Note: For service codes E001 and E002, the number of pages column in the report will be left blank.

The following are SMTP protocol error codes given in RFC821. For details, please ask your network administrator.

421 <domain> Service not available, closing transmission channel
[This may be a reply to any command if the service knows it must shut down]
450 Requested mail action not taken: mailbox unavailable
[E.g., mailbox busy]
451 Requested action aborted: local error in processing
452 Requested action not taken: insufficient system storage

500 Syntax error, command unrecognized
[This may include errors such as command line too long]
501 Syntax error in parameters or arguments
502 Command not implemented
503 Bad sequence of commands
504 Command parameter not implemented
550 Requested action not taken: mailbox unavailable
[E.g., mailbox not found, no access]
551 User not local; please try <forward-path>
552 Requested mail action aborted: exceeded storage allocation
553 Requested action not taken: mailbox name not allowed
[E.g., mailbox syntax incorrect]
554 Transaction failed

POP3 communications:

No standard error code definitions exist for the POP3 protocol. On this machine, the codes will be prefixed with the letter F, followed by a three-digit number denoting the following.

- 001: Text print
- 002: Text received but not printed

- 010: POP protocol USER command error
- 020: POP protocol PASS command error
- 030: POP protocol RETR command error
- 040: POP protocol DELE command error
- 050: POP protocol TOP command error

- 900: Network Card I/F error
- 910: TCP/IP or SMTP/POP not supported or allowed by Network Card

- 931: Email cannot be received (invalid TIFF)
- 932: Email cannot be received (other than invalid TIFF)
- 940: Memory full
- 941: No new mail found in manual reception
- 942: Command time-out
- 950: Server communication error
- 951: Address is not available to be specified, because that POP GATEWAY receiving machine side is using the individual address.
- 952: POP GATEWAY Locations Specified Number is over.
- 953: POP GATEWAY Subject Description Style Error
- 954: POP GATEWAY Password Error
- 955: POP GATEWAY Wrong Tel No. Error
- 956: TEXT Forwarding Error
- F00: Mupis Command Transmission Failed or Response against Command is Invalid.
- F02: End of Maintenance Request Receiving Defective
- 980: NIC ABORT (When Stop Instruction came from NIC)
- 990: Transmission Error between Server

Note: For service codes F001 and F002, the number of pages column in the report will be left blank.

4.7.2 Transmission troubleshooting

A) Transmission fails; a communication error occurs.
- Are the IP ADDRESS, SubNetMask and Default Gateway settings correct?
- Has the SMTP server been configured correctly?
- Has the host name been registered?
- If using DNS, is the DNS server address correct?
- Check to make sure that the server is not down.
- If DNS is ON, some servers may cause an error.

B) When I press a one-touch key with an email address assigned, a warning message appears on the LCD.
- Have you entered an email address that has been assigned on this machine?

C) LCD shows message “OPTION BOARD ERROR”.
- A network card I/F error has occurred - turn the power off and on again to recover.

D) I have turned MDN (or DSN) ON, but no confirmation has been returned.
- MDN: If the receiving InternetFAX/email client is not capable of receiving MDN, you may not get any receipt.
- DSN: If the receiving server does not support DSN, you may not receive any confirmation.
- Both MDN and DSN are sent as text-format messages; if the TEXT PRINT setting is OFF, they will not be printed out.

E) The Tiff file I have sent cannot be printed out on the receiver.
- Have you sent the file at Ex-fine resolution or in coding mode other than MH? T.37 simple mode InternetFAX products support only the STD and FINE resolution settings and MH coding mode.

F) When sending an Email, the SenderID is inputted in the Subject field.
- When the SenderID(EMAIL) setting is ON, the SenderID registered at Internet FAX is automatically added to the Subject field and the main body.

G) To send a file in PDF format:
- Whether a file is sent in Tiff or PDF format can be specified in the user setting mode. Or, you can choose file format for each transmission with the Email key. In addition, it can be set using the SpeedDial communication parameter.

H) To prevent the main body that InternetFAX sends from being transmitted:
- In the user setting mode, the main body (the fixed part) that InternetFAX sends can be made not to be transmitted.

I) To send an Email with the destinations in the CC: filed:
- With the Email key, the forwarding destinations can be specified as CC:.

Note: With the Email key, ON/OFF of SenderID(Email), ON/OFF of Return Receipt, Ftiff/PDF of File Format and the To:/CC: destinations can be specified, and the Subject and From address can be inputted.

J) What is RETURN RECEIPT in the user setting mode?
- With this setting ON, the RETURN RECEIPT (which is a notice that an e-main was received) is requested when sending an Email. If your InternetFAX receives an Email with the RETURN RECEIPT request, it automatically sends back the RETURN RECEIPT to the sender regardless of this setting.

4.7.3 Reception troubleshooting

A) Reception fails; a communication error occurs.
- Are the IP ADDRESS, SubNetMask and Default Gateway settings correct?
- Has the POP server been configured correctly?
- If using DNS, is the DNS server address correct?
- Have you set the USER ID correctly as registered on the POP server?
- Have you set the password correctly as registered on the POP server?
- If APOP is on, it will cause a communication error on a POP server that does not support APOP.

B) Reception does not start.
- Has the POP interval been set at OFF?
- If the TEXT PRINT setting is ON, you cannot receive messages while a print alarm (no paper, cover open, paper jam, etc.) is on.
- Is there a sufficient free memory space? Images have to be first stored in memory and cannot be received if there is not enough space.

C) When I try to receive data manually, a warning message appears on the LCD.
- Have you registered a POP server and a USER ID?

D) The LCD shows message “OPTION BOARD ERROR”.
- A network card I/F error has occurred - turn the power off and on again to recover.

E) A communication error occurs during reception, and a report is printed out.
- The received file is not of a format supported by this machine.

F) The same mail is printed up repeatedly.
- Is the UF84: DELTE POP MSG setting TYPE2? Do not use other settings unless you receive mail on a PC as well as on the fax machine. With the TYPE1 or OFF setting, you will get the same mail repeatedly if the number of messages received exceeds the maximum number that can be logged by this InternetFAX (50). If this happens, access the mail server from your PC and delete all the mail. With the mail server empty, carry out a manual reception on the InternetFAX to delete the current log stored on it

G) I have sent data from an email client on a PC to the InternetFAX, but the reception has failed.
- Have you used a Tiff format supported by this InternetFAX?
- If only a text has been sent, it will not be printed out unless the TEXT PRINT setting is ON.
- Some email clients send email using unusual formats which this machine cannot receive.

H) The fax machine prints out a large number of meaningless characters.
- It may be printing out Base64-encoded data. If this occurs frequently, change the TEXT PRINT setting to OFF.

I) Communication errors occur, and service code F020 is given each time.
- The POP server password may be wrong, causing the server to return authentification errors.

J) Can a PDF file be received?
- A PDF file can be sent but cannot be received.

K) What is RECEIPT FORMAT?
- It is the format of the RETURN RECEIPT to be sent back when receiving an Email with the RETURN RECEIPT request. Two types of format, MDN and TTEXT, can be set. MDN is the format defined in RFC, which Netscape Messenger and Microsoft Outlook support. However, with some mailer that cannot recognize this format, the contents may not be displayed appropriately. Your InternetFAX prints the contents in this format as they are, if TEXT PRINT = ON.

L) Are all the contents of the original mail written in the Original Message filed of the RETURN RECEIPT (MDN)?
• All the contents of the original mail are not written. For details, see 4.4.2.

M) The communication record does not include the history of sending the RETURN RECEIPT (MDN).
• The history of sending the RETURN RECEIPT (MDN) is not listed in the communication record.

N) Is the domain setting required?
• For the Email To FAX(SMTP) operation, UF:91 Domain Name Setting is required. For ordinary POP reception, this setting is not necessary, that is, it is received without domain restraint.

4.7.4 Email To FAX (SMTP) troubleshooting

A) I have sent data using the format “FAX=[telephone number]@[domain name], but it has not been delivered to the InternetFAX.
• You may have set the domain name (the part after @) incorrectly. Consult your Network Administrator about the correct domain entry.

B) The InternetFAX refuses to receive data.
• Have you used characters other than numbers, +, #, *, P or - in the telephone number?
• If you have entered a telephone number longer than 40 digits, the InternetFAX will not receive the transmission.
• Have you registered the recipient’s domain name onto the InternetFAX?
• Is the format of the Tiff file you are sending supported by this InternetFAX?

C) I have sent a text to the InternetFAX, but it does not forward it.
• This machine does not forward text if UF:96 GW FORWARD TEXT is set to OFF.

D) I have tried to forward data by FAX, but communication cannot be established..
• Are the fax’s telephone line settings correct?

E) When Domain mismatch occurs:
• Is the domain of the sender’s Email address registered in the UF:91 Domain Name of the InternetFAX? For example, if the sender’s Email address is admin@fax.test.com, please register “fax.test.com”, “test.com” or “com” to the InternetFAX domain registration. If “com” is registered, all addresses having “com” as the domain will be the subjects of receiving. To restrict reception to “fax.text.com”, register “fax.tex.com” as the domain.
• Do not add . (period) at the top of the domain when registering it. To register “com” as the domain, input “com” instead of “.com”.

4.7.5 Email to FAX (POP) troubleshooting

a) When any transmission error occurs:
   • Confirm the service code. For error details, see 4.5.3.4.

b) When a sent Email is not forwarded:
   • Any mail other than in Tiff or TEXT format will not be forwarded.
   • A TEXT only Email will not be transferred if UF:96 GW FORWARD TEXT is set OFF.
   • Email To FAX(POP) is performed only when the specified character string is entered in the Subject field of the Email. Verify whether the string is inputted correctly.
   - For Email to FAX(POP), 10 addresses at max. can be specified for forwarding. An communication error occurs if 11 or more addresses are set.

c) When Relay Return Report is not sent back:
   • To request the Relay Return Report to be sent back, set the Return Receipt (MDN) to ON when sending an Email. Note that, your InternetFAX automatically transmits the Relay Return Report to the sender if any communication error occurs in the relay operation.
   (The same happens in the Email To TAX(SMTP) operation.)

4.8 Email Maintenance

With the InternetFAX function, the InternetFAX self diagnosis information can be transmitted to a specified address.

4.8.1 Fixed Time Email Maintenance

When SF:44 EMAIL MAINTENANCE in the serviceman setting mode is set ON and any Email address is registered for SF:45 ADMIN EMAIL ADDR., every day at 00:00, an Email including the contents listed in 4.8.3 is transmitted to the address specified for SF:45.

4.8.2 POP Email Maintenance

When SF:44 EMAIL MAINTENANCE in the serviceman setting mode is set ON and an Email with “remotemaint/report” written in the Subject field is received in the POP mode, an Email including the contents listed in 4.8.3 is transmitted to the sender of the mail.

4.8.3 Email_Maintenance Report Format

```
07/01/2001  12:00
PERSONAL ID       =0dc Takasaki
TEL NO.           =609-222-1234
TEL NO.(G3 OPTION)=609-333-4567                                  *2
MAIN BOARD
              CPU-ROM  VERSION          aaaa                          ┐
                       HASH             OK       hhhh                 │
              CPU-RAM                   OK                            │
              PROGRAM1 VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              PROGRAM2 VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              LANGUAGE VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              DEFAULT  VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              DEFAULT  TYPE             01                            │
              MODEM    VERSION          hhhh                          │
              RAM1     8M               OK                            ├ *1
              RAM2                      OK                            │
              CARTRIDGE(TONER/ID)                 bbbb/bbbb           │
              OPT-MEM  8M               OK                   *2       │
DEVICE ID     Okifax 5700                                             │
HSP           TYPE2                     OK                   *2       │
G3 OPTION BOARD                         OK                   *2       │
              CPU-ROM  VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              CPU-RAM                   OK                            │
              PROGRAM  VERSION          aaaa                          │
                       HASH             OK       hhhh                 │
              RAM      2M               OK                            │
              DPRAM    2K               OK                            │
              MODEM    VERSION          hhhh                          ┘
MACHINE CONDITION
              COVER                               CLOSE          *3
              DRUM CART.                          EXIST          *4
              TONER                               NORMAL         *5
              PRINTER ALARM                       NONE           *6
MACHINE COUNTER
              DRUM                                12345
              TONER                               12345
              SCAN                                12345
              PRINT                               12345
              DRUM(T)                             12345
```

*1 Listed according to the description conditions of the self-diagnosis report.
*2 Note that, with regard to the device option items, if any optional device is not mounted, the line for the device is deleted with the following lines moved upward.
*3 COVER: “OPEN” or “CLOSE”
*4 DRUM CART.: Detects the NO ID alarm. “NONE” or “EXIST”
*5 TONER: Detects the Toner Near End alarm. “NORMAL” or “LOW”
*6 PRINTER ALARM: Displays the type of a printer alarm if it is detected. “NONE”, “PA2”, “PA3” or “PA4”

5. Network Printing

Printing Documents

To print documents to your fax machine via the LAN you need to install the appropriate software from the supplied CD-ROM and make the correct settings for your environment.

Note: When printing on transparencies, set the Media Type to Light, use the manual feed method, and set the machine output for face up stacking. (See the fax User's Guide for these adjustments.) The recommended transparency type is 3M CG2300.
A brief description of the procedure for supported operating systems appears in this section.To install network card utilities we recommend that you select the Quick Setup option where it is available.

[Important!] The Hyper-W Printer driver supports only network printing. Printing via the parallel port is not supported. Local printing through the parallel port requires a different driver. For further details, please enquire through your authorized supplier.

5.1 Procedure for Supported Operating Systems

NetWare

Recommended process:
1) Install printer driver.
2) Install network card utility.
3) Configure network card.

The NetWare server has two modes; printer server mode and remote printer mode. The Network Card supports either mode. Using NetWare requires that the fax machine should be attached as a printer under NetWare control. For detailed configuration, see the utilities manual on the CD-ROM.

Windows NT4.0, Windows2000

Recommended process:
1) Install printer driver.
2) Install network card utility.
3) Configure network card.

When printing directly from WindowsNT4.0, 2000 please use "LPR (Microsoft TCP/IP Printing)" included in Windows NT4.0, 2000 Add the LPR port as the
driver output port and assign it the IP Address configured for Network Card. For details, see the utilities manual in CD-ROM.
TCP/IP should be added to Windows NT4.0, 2000 because it is used for LPR.

Note: You may receive a warning message about authentification while installing the driver on Windows2000. Please ignore this message if it appears, as it will not cause any problem with the installation of the driver.

Windows 95/98/Me

Recommended process:
1) Install printer driver.
2) Install network card utility.
3) Install LPR utility.
4) Configure network card.

When printing directly from Windows 95/98/Me, the LPR utility should be installed from the supplied CD-ROM. For details see the utilities manualin CD-ROM.
TCP/IP must be installed in Windows 95/98/Me in order to use LPR.

Windows 3.1

Recommended process:
1) Install printer driver.
2) Run SETUP.EXE from the Win31 directory on the supplied CD-ROM.
3) Configure network card.

When printing from Windows 3.1 a NetWare Server is required as Windows 3.1 is not a network operating system. “Printing via LPR,” from Windows 3.1 connected to the network with other commercial TCP/IP protocols, is not assured.
Other Operating Systems Other operating systems, such as Macintosh or UNIX, are not supported.

Configuring from Network Utilities (CD Setup Utilities)

Your Network Card configurations may be altered from your PC via the network, using the utilities in CD-ROM. You can access these from the installer. With these utilities, TCP/IP and NetWare parameters may be configured. For details, see the Utilities Manual.

Note: When using the above utilities, the setup screen for EtherTalk, which the fax machine does not support, will be displayed. Please set EtherTalk “Disable” to prevent it from being used.

5.2 Setting Items

You can alter network settings by selecting **UF93:** NETWORK SETTINGS. To print from Windows using Lpr, it is necessary to set the IP ADDRESS. This is not required if printing from NetWare only, but it is necessary for using InternetFAX functions.

1: IP ADDRESS
Sets the IP address.

2: SUBNETMASK
Sets the subnet mask.

3: DEFAULT GATEWAY
Sets the default gateway address.

The following three settings are specific to Network Printing.

- UF80: LAN PRINT T.O. (5 sec., 30 sec., 5min.)
It is impossible to judge whether printing data is not being transmitted due to network delay or the end of the data stream. This time-out configuration allows the device to cancel a print job when no printing data can be found after a specified time has elapsed since the last data was submitted. If the default configuration is acceptable, please do not alter it.

- UF81:PAPER SIZE CHECK (ON, OFF)
With this configuration ON, an alarm will be displayed at the LCD when the paper size specified from the PC and that of the tray specified by fax machine are different. If this alarm is displayed set the correct paper size in the specified tray. Printing will begin when the tray is closed. After the printing, set the same recording paper as configured for the tray, or alter the tray configuration to the correct paper size. With this configuration OFF, printing will be conducted neglecting the paper size difference.

- UF82: AUTO TRAY SW. (ON, OFF)
With this configuration ON, printing will be done using paper in another tray when paper is out in the 1st or 2nd tray and paper size of the1st and 2nd tray is the same.

5.3 Banner Output

Your fax machine supports TEXT-style Banner of NetWare 3.x and NetWare 4.x. Note that the machine only supports the ASCII codes listed below. Any ASCII code not supported will be replaced by a space.

Table.J-3 Supported characters and fonts

	00	10	20	30	40	50	60	70	80	90	A0	B0	C0	D0	E0	F0
0			SP	0	@	P	`	p								
1			!	1	A	Q	a	q								
2			“	2	B	R	b	r								
3			#	3	C	S	c	s								
4			$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			‘	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l	|								
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o									

If a NetWare banner cannot be printed, alter the configuration at your PC to “No Banner Used”, or at NetWare Server to “No Banner Sent”. (If in doubt ask your NetWare Network Administrator for details.)
Although the Network Card supports FTP and LPR banners, when a problem occurs with banner printing, set the banner to “NO” with the affixed utilities.

5.4 Troubleshooting

- OPTION BOARD ERROR
  When OPTION BOARD ERROR is displayed on the fax machine display, an error may have been caused at the interface with the Network Card. In this case, turn off the fax machine, check that the network card is correctly installed and power up again.

- LAN Data Error
  When LAN DATA ERROR is displayed on the fax display, there may be a problem in the printing data transmitted via the network. As the printing data will be cancelled, please conduct the printing again. If this error re-occurs while printing documents the fault may be a paper jam. Please clear the paper jam.

Note: When a print job was cancelled on a PC, LAN DATA ERROR may be displayed. This is because defective data may have been transmitted to the fax machine.

- Network Problem
  If any other printing problems occur other than the errors mentioned in this chapter, refer to the utilities manual in the CD-ROM.

6. Appendix

6.1 Simple Operating Instructions on Internet Fax Communication

6.1.1 General conditions

To use Internet Fax, a Network Card must be installed in this machine and connected to a LAN. The Network Card for this machine can be connected to a 10 BaseT or 10/100baseTX LAN. Also, to make a LAN connection, an IP Address, SubnetMask and Default Gateway must be configured on this machine; ask your network adminstrator about these settings.
If the LAN uses a DHCP server, it is not necessary to configure these settings as the server will do it automatically.
Internet Fax settings can be configured either using the network tool or on the machine itself, but DHCP settings are supported by the network tool only.

After setting the correct IP Address, SubnetMask and Default Gateway, configure the machine for Internet Fax transmission/reception.

6.1.2 Internet Fax transmission

To send an Internet Fax message, you need a mail server from which to send email. Please consult your network adminstrator about the settings listed below, which are required in order to make a connection to the mail server.
These settings are similar to those of popular mail clients such as Netscape Messenger, Outlook and Eudora.

A. SMTP Server Address /Name
   Enter the SMTP server name or IP Address.
   If entering the server's IP Address, be sure to type the dots (full-stops) dividing the numbers as well (e.g., 192.168.1.1).
   You may enter a server name only if a DNS server has been configured.
B. DNS server's IP ADDRESS
   This setting is not required if the SMTP server has been sepcified by its IP ADDRESS. A DNS server can convert a server name into an IP ADDRESS.
C. HOST NAME
   Enter the host name of this machine. If you do not know the host name, enter the email addrerss of this machine instead.
D. Email Address
   Enter the email address assigned to this machine.

You can start transmission when the above settings have been configured.
To send a fax, place a document on the machine and press the one-touch button on which the email address of the recipient has been registered; the document will be scanned into memory and before transmission.
The data will be converted into a TIFF file and sent to the recipient.

6.1.3 Internet Fax reception

To receive an Internet Fax message, you will also need a mail server for sending email. Please consult your network adminstrator about the settings required to connect to the mail server.

A. POP Server Address /Name
   Enter the POP server name or IP Address.
   If entering the server's IP Address, be sure to type the dots (full-stops) dividing the numbers as well (e.g., 192.168.1.1).
   You may enter a server name only if a DNS server has been configured.
B. DNS server's IP ADDRESS
   This setting is not required if the POP server has been sepcified by its IP ADDRESS; a DNS server can convert a server name into an IP ADDRESS.
C. POP server user name
   Enter the user name assigned to this machine for accessing the POP server.
D. POP server password
   Enter the password assigned to this machine for accessing the POP server.

The machine is ready to receive Internet Fax messages when the above settings have been configured.
To receive a fax message, the machine will access the server automatically at regular intervals according to the POP Interval Time setting. If there is mail, the machine will print it out automatically. Please note that this machine can receive TIFF files and text-format mail only; it cannot receive files in other formats such as Word and Excel. Also, certain formats of TIFF files cannot be received by this machine.

6.1.4 How to access different settings on this machine

Setting item	Operation
IP Address	MENU+9+3+1
SubnetMask	MENU+9+3+2
Default Gateway	MENU+9+3+3
SMTP Server Name/Address	MENU+9+3+4
POP Server Nama/Address	MENU+9+3+5
POP User ID	MENU+9+3+6
POP Password	MENU+9+3+7
Domain Name Service Primary Server	MENU+9+3+8
Domain Name Service Secondary Server	MENU+9+3+9
HOST Name	MENU+9+3+10
Fax Email Address	MENU+9+3+11

6.2 Examples of Mail Server Settings for Email-to-FAX Gateway Service

To use gateway service 1 (email→INTERNET FAX→G3 FAX), the mail server and the DNS server must be configured to forward email to the Internet Fax. This document gives some examples of settings for forwarding mail to the Internet Fax.
The settings given here are only examples; servers do not necessarily have to be configured as shown in order to use the gateway service.
The domain name, host names and IP addresses given in this text are for example only; you must set these values in accordance with your own network setup.
The setting changes explained here can be made only by a network administrator.

6.2.1 DNS server

Firstly, register the Internet Fax onto the DNS server. In this example, the settings for a type of DNS server called BIND run on UNIX are explained.
Assume that there is an existing network of the following setup:

Network domain name:	abc.com
Host name of the mail server in this domain:	mail.abc.com
IP address of this mail server:	192.168.001.100
Host name of the DNS server in this domain:	dns.abc.com
IP address of this DNS server:	192.168.001.101
IP address of the client PC:	192.168.001.050
Host name of the client PC:	user.abc.com

Now, install the Internet Fax on this network.

Host name of the Internet Fax:	fax.abc.com
IP address of the Internet Fax:	192.168.001.105

Add a record of the Internet Fax on the zone file of the DNS server (dns.abc.com).

Address (A) record:

```
.............
mail.abc.com.      IN    A     192.168.1.100
dns.abc.com.       IN    A     192.168.1.101
user.abc.com.      IN    A     192.168.1.50
fax.abc.com.       IN    A     192.168.1.105
.............
```

Also, add a PTR record of the Internet Fax to the reverse zone file.

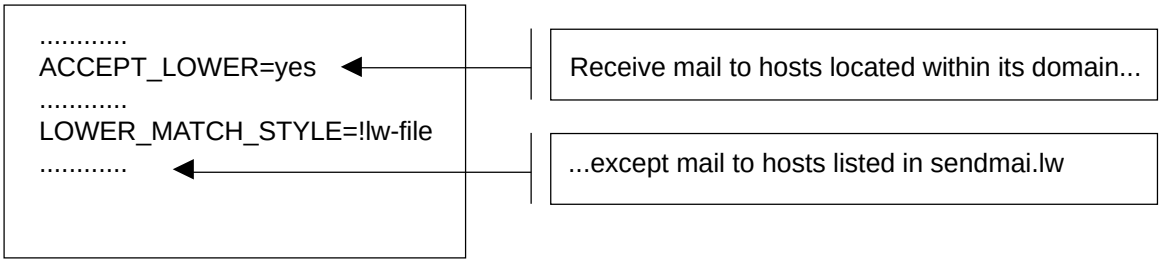
Pointer (PTR) record:

```
.............
100.1.168.192.in-addr.arpa.      IN    PTR   mail.abc.com.
101.1.168.192.in-addr.arpa.      IN    PTR   dns.abc.com.
050.1.168.192.in-addr.arpa.      IN    PTR   user.abc.com.
105.1.168.192.in-addr.arpa.      IN    PTR   fax.abc.com.
.............
```

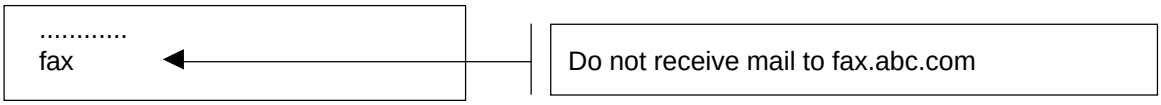
When all the records have been updated, restart the DNS server.
After the above configuration has been made, all mail addressed to <xxxx@fax.abc.com> will be forwarded to the Internet Fax.

6.2.2 Mail Server

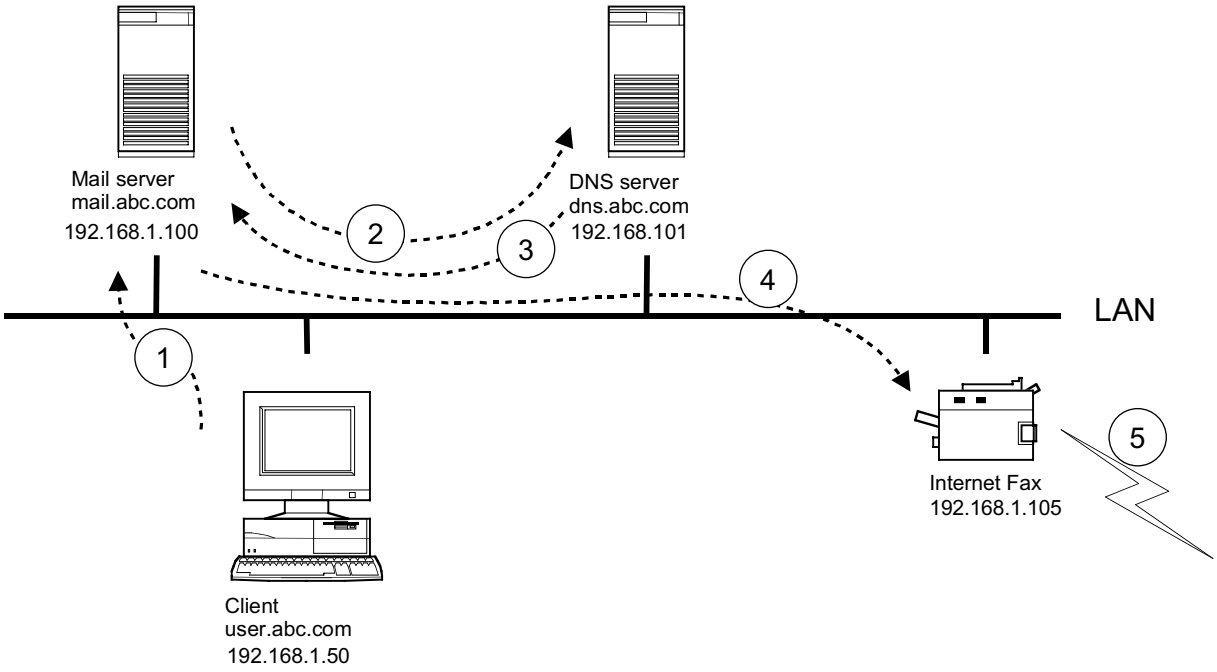
In many cases, the DNS server configuration explained in Section 1 is all you need to use the email-to-FAX relay service. However, some mail servers are configured to process all mail addressed to hosts belonging to their domain as mail to themselves. If mail server mail.abc.com has been set up in this way, it will regard mail to xxxx@fax.abc.com as mail to one of its users and will not forward it to the Internet Fax. To prevent this, it is necessary to configure the mail server so that it will not process mail addressed host fax.abc.com.
The following explanation is based on an example where the OS of mail.abc.com is FreeBSD and its mail server is sendmail. Configuration file sendmail.cf is generated using utility “CF”. Where no utility of this kind is available, you will have to edit sendmail.cf directly; as the procedure for this operation is very complicated, it will not be explained here.
Insert the following strings to file sendmail.def.



Add to /etc/sendmail.lw a string specifying email-to-FAX relay.



Create sendmail.cf and overwrite the original sendmail.cf with it. Now restart the mail server. After the above changes, sendmail will forward mail addressed to xxxx@fax.abc.com to Internet Fax instead of processing it itself.



(1) Client sends mail to mail server (To: fax=123@fax.abc.com)
(2) Mail server makes enquiry to DNS server regarding fax.abc.com
(3) DNS replies to mail server (returns the IP address of fax.abc.com)
(4) Mail server forwards mail to Internet Fax
(5) FAX communication to FAX number 123

Fig.J-8 Mail forwarding

Appendix K

1. Overview

This document describes the system specification of real time Internet Fax functions with FX-056VP/176VP. The real time Internet FAX functions with FX-056VP/176VP will be available when an optional board made by Oki Electric is installed. These functions comply with ITU-T.38.
Hereafter, real time Internet FAX is described as IPFAX.

2. Initialization

If an IPFAX board is installed when the power is turned on, “OPTION BOARD INITIALIZE” display appears.
The main unit moves to a standby display after the board start (IPFAX not operable) interruption.
However, as a guard timer, if an interruption is not done in 20 seconds at maximum, it is assumed as a board error, and IPFAX function will be disabled. A board error can be recovered only by turning the power off/on.

[Initialization process of the board side]
(1) From turning on the power to “Initial state interruption”: Approx. 4.1 sec (fixed)
(2) From “Initial state interruption” to “Start (IP FAX not operable) interruption: Approx. 2.8 sec (fixed)
(3) From “Start (IP FAX not operable) interruption” to “Start (IP FAX operable) interruption”: Minimum 0.2 sec

The main unit moves to a standby status by interruption (2). Because Interruption (3) is variable depending on GK (Gate Keeper) or network condition, it does not wait for this interruption. If sending is performed while it is waiting for Interruption (3), it is passed to re-dial.

3. One touch addition

3.1 IP address

A number with “*” at the beginning is considered to be an IP address. Each octet is divided by “*” instead of a period.
Example) *192*168*001*254

If upper digits are identical with the device IP address, the upper digits can be omitted.
Example) device IP address: 202.250.128.020
Added No.1: *254 →Assumed as *202*250*128*254.
Added No.2: *001*180 →Assumed as *202*250*001*180.
Added No.3: *001.180 →Assumed as *202*250*001*180.

If “P” , “+” , or “-” is included in the middle, it is deleted and passed to an IPFAX board. Even though octet is more than 4 digits, it is added as an IP address. However, it is not a correct IP address, and error occurs when a call is made.

Even an incorrect IP address (Example: 999*999*999*999) is added as an IP address. However, an error occurs when a call is made because it is in correct.
Destination designation with an IP address is included as a function for debugging. The operation is not disclosed to regular users. However, because we do not prepare a setting that prevents it, if a user enters a destination that begins with “*” by mistake, it makes a call assuming that it is an IP address.

3.2 Telephone number (IPFAX)

If “#” is entered at the beginning, it is assumed as a telephone number via IPFAX. The rest of the telephone number except the beginning “#” is passed to an IPFAX board. A space, “P” , “-” , and “+” is deleted from the number, and the rest of the number is passed to the IPFAX board.
Example) #027-328-6398 : Calls “0273286398” .
#-027P328 6398 : Calls “0273286398” .

3.3 OR destination

The combination of a main destination and an OR destination can be added as an arbitrary combination of G3/G4 telephone number/IPFAX phone number/IP address.

4. Basic performance of transmitting

4.1 IPFAX call designation

4.1.1 One touch

In case a telephone number added to One Touch is IP address or IPFAX telephone number, a call is made via an IPFAX board. The characters and the number of digits that IPFAX can use as telephone numbers are limited, however, there is no such limitation with a main unit.
In case an IPFAX board is not operable, a call error ends the process when One Touch of IP address or IPFAX telephone number is designated. When you press One Touch, it is not assumed as an illegal address.

4.1.2 Entering Ten Key

If “*” is entered in the beginning, it is assumed as an IP address and a call is made when either G3 or G4 communication mode is selected.
If “#” is entered in the beginning, a call is made as a telephone number for IPFAX when either G3 or G4communication mode is selected.

4.1.3 Chain dial

(1) If you designate a Chain Dial before you make a call, a call is not made to IPFAX. “#” or “*” is assumed as a part of telephone number and called to G3/G4.
(2) Chain dial after you make an IPFAX call is prohibited.

4.2 Fall back specifications

Even though an IPFAX designated call gets NG, a fall back to G3/G4 is not performed.
Because a user selects IPFAX, it is assumed that a fall back is not necessary.

4.3 Display during communication

When a call is made : REAL TIME IPFAX TX
CALLING : Period during inquiry to GK is included.
During a transmission : REAL TIME IPFAX TX (No transmission rate is displayed.)
Communication result : Same as before

Destination display during calling appears as you enter (“#” or “*” is still at the beginning.)
The debugging display during communication appears the same way as G3/G4.

4.4 Terminating communication

You can terminate communication by pressing STOP key twice during both calling and transmitting.

4.5 Learning parameter

No learning is performed to IPFAX destinations.

4.6 Communication error

A communication error regarding FAX protocol (not network protocol) is treated in the same way as an error in G3/G4 communication (error display, redial, etc.).

4.7 Board error processing

Before a call, a re-dial or a communication error process is taken depending on a board's error condition as the below table shows.

Board status	Condition	FAX's behavior
0x01	Initial process	Re-dial with T.38
0x02	Starting status (inoperable)	Re-dial with T.38
0x03	Starting status (operable)	Normal behavior
0x04	Starting status (GK not added)	Re-dial with T.38
0x05	Starting status (LAN cannot be used)[2]	Communication error
0x0F	Trouble status	Communication error

The below table shows the processes taken if a board returns an error when a call is made.

Error code	Description	FAX's behavior
0x01	Receiver rejected	Communication error
0x02	GK rejected	Communication error
0x03	No response	Redial with T.38
0x04	Cancel	Communication cancel
0x05	Board Busy	Redial with T.38
0x06	A telephone number error	Communication error
0x07	GK not added	Redial with T.38
0x08	LAN cannot be used	Communication error
0xFF	An error	Communication error

4.7.1 Operation restrictions in an board error status

The following shows operation restrictions in a board error status.

1. Board error when only an IPFAX board is installed
   Designating a destination is possible. However, if the destination is a destination for IPFAX ("*" or "#" is added to the beginning), a communication error occurs.

2. Only G4 board has an error when both G4 board and IPFAX board are installed
   Designating a destination is possible. However, if you designate a G3/G4 destination, "WAIT A MOMENT" display remains and it waits for permanently. If you designate broadcasting, "WAIT A MOMENT" appears and you have to wait permanently when you try to call a G3/G4 destination.

3. Only IPFAX board has an error when both G4 board and IPFAX board are installed
   Designating a destination is possible. However, if you designate a destination for IPFAX, the communication ends with an error message. If you designate broadcasting, a destination for IPFAX gets an error, but the rest of the communication is performed thoroughly.

[1] DHCP failure included
[2] DHCP failure not included

5 Basic behavior of receiving

5.1 Receiving behavior

The same receiving behavior with regular PSTN receive is applied. Receiving conditions are the same, too.
Terminating receiving by STOP key is prohibited as usual.
IPFAX does not receive in PC mode.
Receiving is immediately done in TAD, TEL/FAX mode.

5.2 Displays during communication

Ringing	: Same as before
Receiving	: REAL TIME IPFAX RX (Transmission rate is not displayed.)
Communication result	: Same as before

Debugging display appears during communication.

5.3 Communication error

(A communication error regarding FAX protocol (not network protocol) is treated in the same way as an error in G3/G4 communication (error display, redial, etc.).

6. Communication service

IPFAX provides all the communication services such as confidential and relay initiation that G3/G4 provides.

7. Communication specifications

Depending on whether the receiver is T.38 FAX, VoIP-TA, or G3 FAX via a gateway, communication speed is affected. (both sending and receiving)

- T.38 FAX : Regardless of modem speeds, communicates at the maximum capability.
- G3 FAX : V.34 communication is prohibited. Also, Oki high speed protocol B is prohibited, either.

Various timer values in protocol are subject to change.

For details, refer to Section “IP-FAX communication specifications.”

8. Other functions

8.1 Power Save

Power Save is prohibited when an IPFAX board is installed.

8.2 Off Hook

8.2.1 Off hook during IPFAX

Off hook during IPFAX sending is not displayed (“Communication” display remains.) Voice calling/DTMF/manual receiving are prohibited.
Off hook during IPFAX receiving is not displayed (“Communication” display remains.) (same as during IPFAX sending) Voice calling/DTMF/manual receiving are prohibited.
You cannot off hook, insert a document and manually send it during IPFAX. If you designate a destination, it is stored as a send request.
An off hook alarm does not ring.

8.2.2 IPFAX receiving during off hook

If IPFAX ringing occurs during off hook, IPFAX receive is performed. IPFAX ringing during a voice calling is prohibited.
If IPFAX ringing occurs during off hook alarm, the off hook alarm is canceled and IPFAX receive is performed.

8.3 Soft ringer

Because G3 communication during IPFAX communication is prohibited, soft ringer does not ring even though there is ringing.

8.4 Voice calling

When IPFAX number is designated, the call is for communication. “PLEASE SET DOCUMENT” display appears in the screen.

8.5 Destination display and record

Destination display during calling, destination record in sender’s column, and destination description in various reports are displayed or recorded as entered (“#” and “*” at the beginning are included.)

8.6 Fax2Net

When both IPFAX and Fax2Net are available, and e-mail is selected as a destination, a call is made to Fax2Net, and FaxToEmail is performed.

8.7 RMCS

Even though RMCS is ON during ID lock, an IPFAX board does not accept ringing from RMCS. G3/G4 line sides can receive as it currently can.

9. Dual operation

Multiple communication between IPFAX communication and G3 or G3I mode is prohibited.
Communication between IPFAX communication and G4 mode communication is permitted.
Multiple communication between IPFAX and G4 mode performs instant Dial.
When IPFAX ringing and G3 or G3I mode ringing conflict, the first ringing is taken and the communication that occurs later is rejected.
G3 or G3I mode ringing during IPFAX is held. Or IPFAX ringing during G3 or G3I mode communication is held as well.
An IPFAX sending request during G3 or G3I mode communication is read in memory. On the other hand, G3 or G3I mode sending request during IPFAX communication is read in memory. In either case, when the first communication is done, a call is made.

Multiple performance other than communication is equal to the combination of multiple performance in MCNT.

10. Setting and initializing NIC

“SETUP” →“IP FAX OPTIONS” →board setting (80 - 83)→Moves to IPFAX board setting. The next page shows procedure flow.

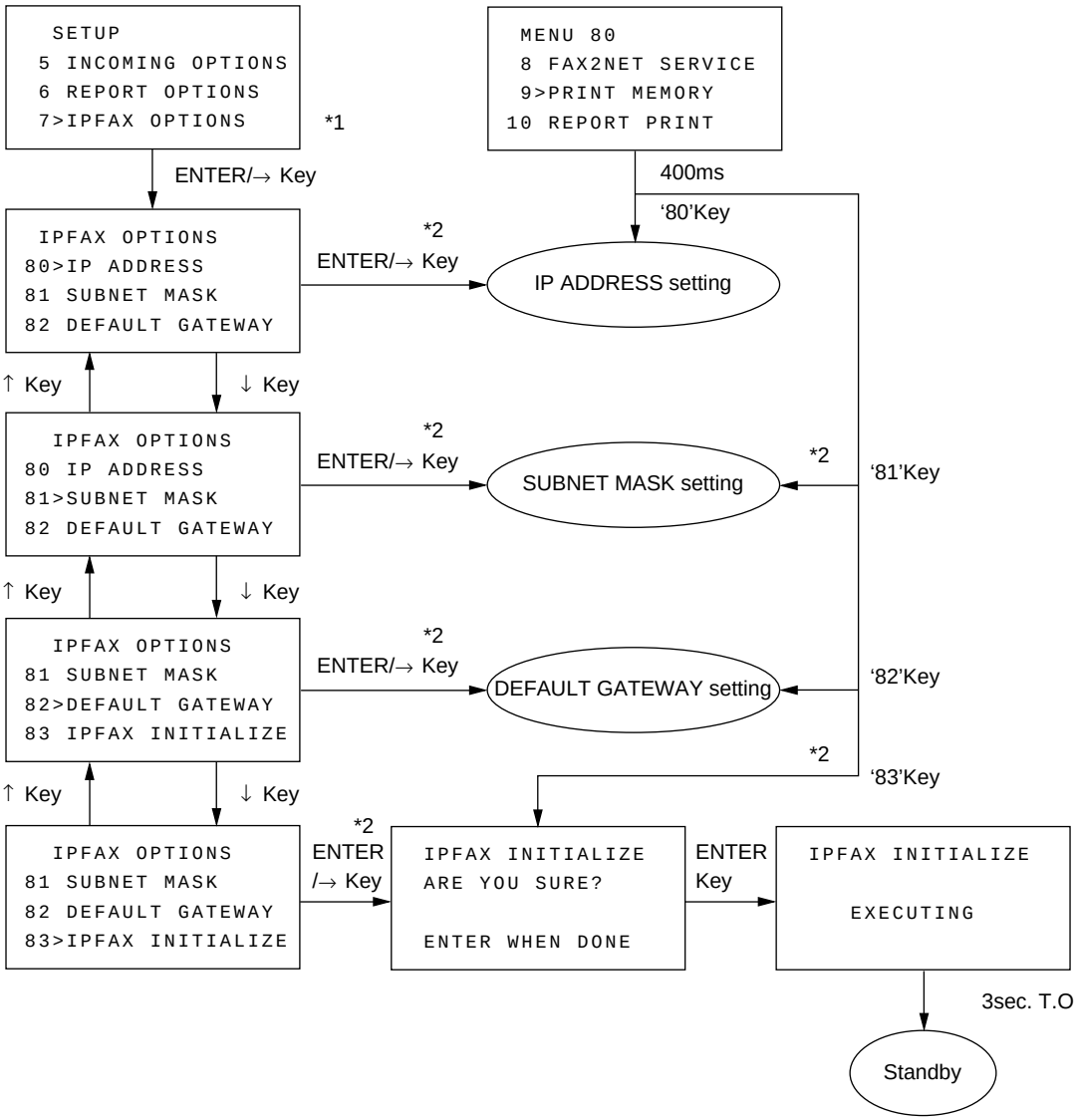
(1) IP address (80)
Sets the device IP address. DHCP becomes valid when you set “0.0.0.0.” When DHCP is ON, the setting screen displays the captured IP address.
When DHCP is ON, and IP address is captured from DHCP, IP address renewal entering by operator panel operation is ignored. Therefore, if you want to set DHCP to OFF, you need to set via network using console software.
In case DHCP capture fails, “0.0.0.0” appears. At this time, you can set a new IP address by operator panel operation.

(2) Subnet address (81)
When DHCP is set to ON, an entered value is ignored.

(3) Default gateway (82)
When DHCP is set to ON, an entered value is ignored.

(4) IPFAX board initialization (83)
"ARE YOU SURE ?" appears and asks a user. After this, if the user presses ENTER key, initialization command is issued to an IPFAX board, and a main unit returns to standby mode in three seconds.

The set value is communicated to the board when the screen for entering various setting values disappears.



*1) Can move only when IPFAX option is available. (If not available, "7>IPFAX OPTIONS" does not appear, either.)

*2) When an IPFAX board error occurs, "FUNC.NOT AVAIL." Appears for 3 seconds by pressing ENTER/→Key.

80:When IP ADDRESS setting is changed, the setting is renewed when operation is over with DHCP OFF. When setting of 81:SUBNET MASK or 82:DEFAULT GATEWAY is changed, the setting is renewed when operation is over with DHCP OFF. However, when IP Address is 0.0.0.0, it is ignored because DHCP is set to ON.

(Note) When DHCP is ON, FAX operation cannot change IP and etc. (The set value is ignored.) Checking settings is possible.

(Note) If you want change DHCP from ON to OFF, change it using console soft.

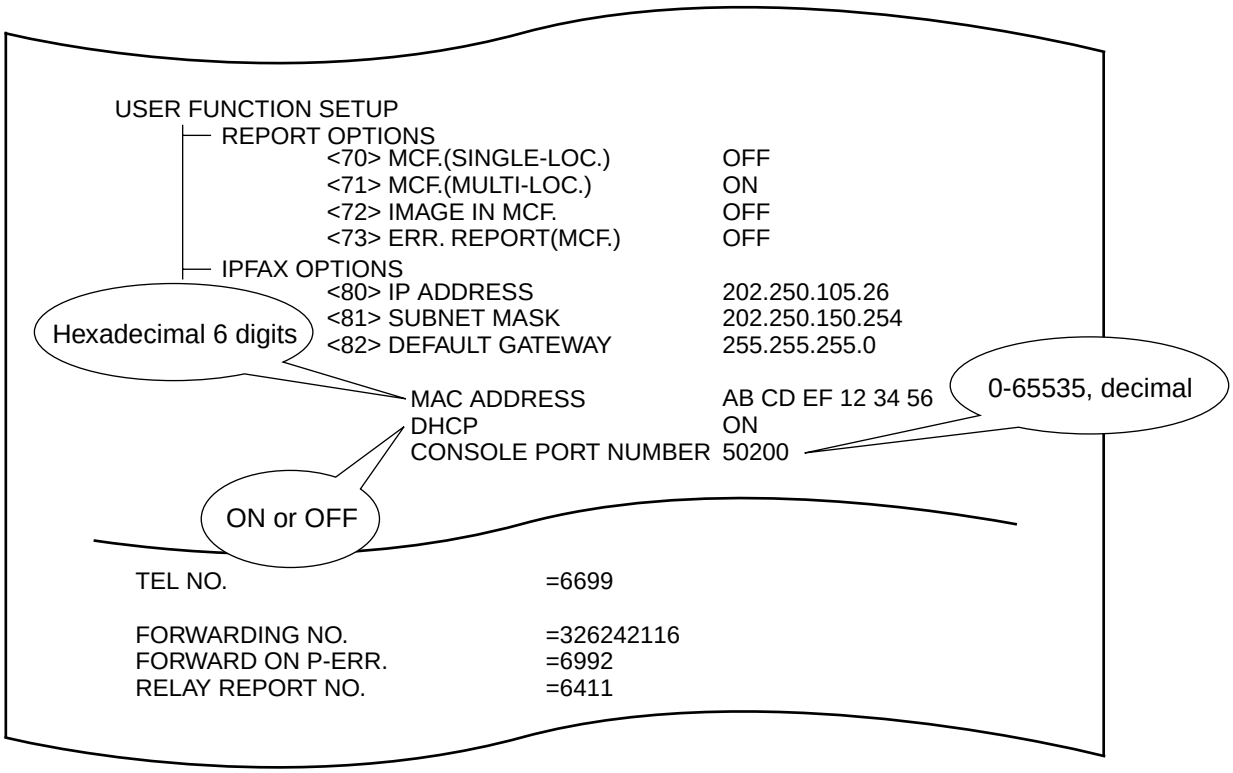
(Note) Even though DHCP is ON, FAX operation can change IP and etc. if IP capturing from DHCP server failed.

11. Report

11.1 Configuration Report

11.1.1 CONFIGURATION P2

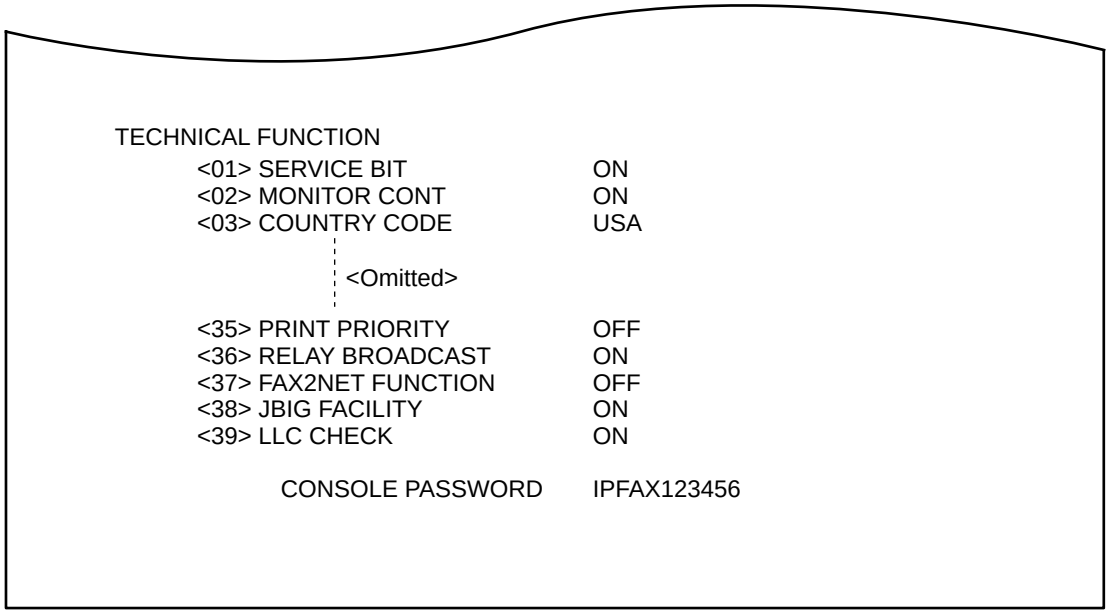
When IPFAX is installed, replaces “LAN OPTIONS” with “IPFAX OPTIONS” and writes the following. However, when NIC is installed, “LAN OPTIONS” information is written as it has been done so far.



When a board has an error, only the title is written and the contents will be blank.

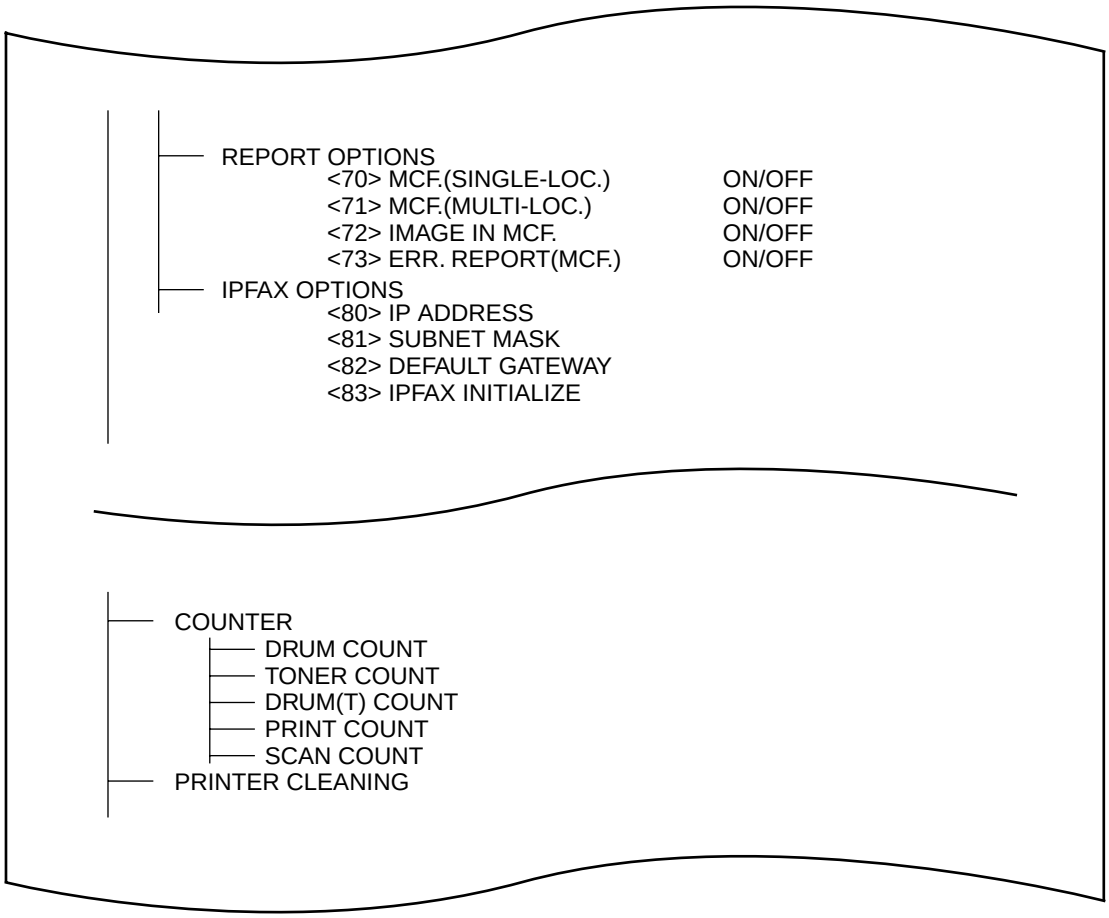
11.1.2 CONFIGURATION P3

Writes a password. (ASCII code 32 bytes) When a board has an error, only the title is written and the contents will be blank.



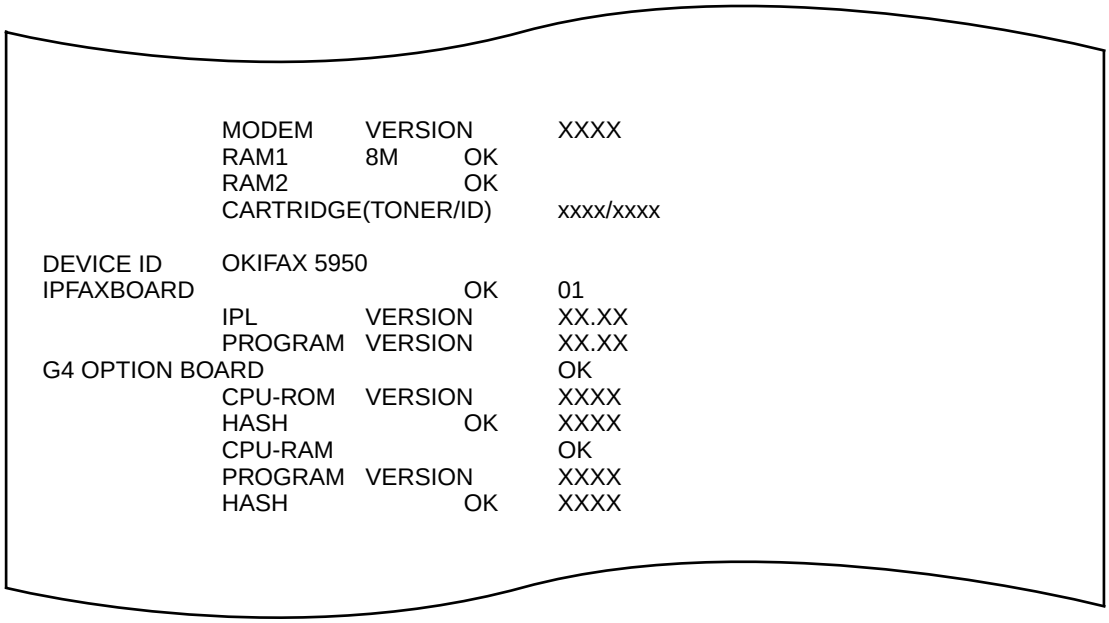
11.1.3 Function List (Page 3)

When IPFAX is installed, replaces “LAN OPTIONS” with “IPFAX OPTIONS” and writes the following information. However, when NIC is installed, writes “LAN OPTIONS” as previous models do regardless of a board error.



11.1.4. Self Diagnosis Report

- Writes board condition. (OK: 01 - 05, NG: Writes DPRAM error code.)
- Writes F/W version of the IPL part and operation part. (ASCII code 5 bytes)



```
                MODEM     VERSION      XXXX
                RAM1      8M      OK
                RAM2              OK
                CARTRIDGE(TONER/ID)    xxxx/xxxx

DEVICE ID       OKIFAX 5950
IPFAXBOARD                        OK   01
                IPL       VERSION      XX.XX
                PROGRAM   VERSION      XX.XX
G4 OPTION BOARD                        OK
                CPU-ROM   VERSION      XXXX
                HASH              OK   XXXX
                CPU-RAM                OK
                PROGRAM   VERSION      XXXX
                HASH              OK   XXXX
```

The below table shows board conditions.

Board condition	Board status	Self-diagnostic OK/NG	Code to be written
Initial process	Status=0x01	OK	01
Starting condition (inoperable)	Status=0x02	OK	02
Starting condition (operable)	Status=0x03	OK	03
Starting condition (GK not added)	Status=0x04	OK	04
Starting condition (LAN cannot be used 3)	Status=0x05	OK	05
Trouble conditions	Status=0x0f	NG	Writes detailed error code of DPRAM

Detail of error code:

00 xx xx ~ 06 xx xx : IPL control part
07 xx xx ~ 0F xx xx : operation control part
10 xx xx ~ 1B xx xx : H323 protocol part

[3] DHCP failure included

Communication mode writing

11.1.5 Modes for IPFAX written in communication management report

Communication	G3	IPFAX
TX	TX	TX-IP
POLL-TX	POLL TX *1	POLL TX-IP
Bull. POLL TX		
Bull. POLL TX(BOX)	POLL=XX	POLL=XX-IP
Broadcast	TX	TX-IP
Relay Broadcast	REL-T=XX	REL-T=XX-IP
Relay BC Conf. TX	REP-T=XX	REP-T=XX-IP
FAX Forwarding	FWD-T	FWD-T-IP
Batch TX	BATCH	BATCH-IP
Fax2Net(WEB Retrieval)	-	-
Fax2Net(Broadcasting)		
Fax2Net(Payment Card Reg.)		
RX	RX	RX-IP
Polling RX	POLL RX *1	POLL RX-IP
Confidential RX	CONF=XX	CONF=XX-IP
Relay Initiate RX	REL-R=XX	REL-R=XX-IP
FAX Forwarding RX	FWD-R	FWD-R-IP
Manual TX	TX *2	-
Manual POLL TX		
Manual RX	RX *2	-

11.1.6 Modes for IPFAX written in MCF-multi report

	G3	IPFAX
Broadcast	B.C.	
Relay Broadcast	REL-BC=XX	

12. Service codes

The following service codes are added.

9092: IPFAX disconnected due to network cut

The following shows the service codes due to IPFAX board errors. The upper two digits are “15” and the lower two digits show an error code of the board.

1501: Receiver rejected
1502: GK rejected
1503: No response
1504: Cancel
1505: Board BUSY
1506: Telephone number error
1507: GK not discovered
1508: DHCP failure
15FF: Board error

If an IPFAX call is tried when I/F with the board is not available4 , the following is the code.

15FE: Board error

The service codes due to other errors during IPFAX are the same as those of G3/G4.

[4] Conditions when display such as “OPTION BOARD ERROR” appears in LCD

13. IP-FAX communication specifications

13.1 IP-MAX communication

(1) IP-MAX communication is IP-FAX board communication which is independent of modem's communication speed.
(2) IP-MAX communication declares capability by NSF/NSC signal during IP-FAX board communication.
(3) IP-MAX communication instructs by NSS signal only when capability is declared by NSF/ NSC signal.
(4) IP-MAX communication declares/designates by the following Bit of NSF/ NSC/ NSS signal.

Added function length	Byte number	40 (02)
Added functions(s)	1	Encryption communication
	2	MMR coding
	3	DCN added information
	4	ECM
	5	Re-send frame length
	6	Re-send parameter
	7	19.2K BPS
	8	Not defined
Added functions(2)	1	JBIG standard
	2	JBIG option
	3	IP FAX communication
	4	Not defined
	5	Not defined
	6	Not defined
	7	Not defined
	8	Not defined

13.2 Restrictions in IP-FAX board communication

13.2.1 When IP-FAX board communication is performed, V.34 communication is not allowed.

13.2.1.1 Sending

1. Does not move to V.34 communication when an IP-FAX board sends, even though it receives ANSam signal. Communicates by DIS (NSF) signal.
2. Does not move to V.34 communication when an IP-FAX board sends, even though V.8 Bit of receive DIS signal is ON. (CI signal is not sent.)

13.2.1.2 Receiving

1. ANSam signal is not sent when IP-FAX board sends.
2. V.8 Bit of DIS signal is set to OFF when IP-FAX board sends.

13.2.2 In case of communication by IP-FAX board, Oki high speed protocol B is not allowed.

13.2.2.1 Sending

1. In case of communication by IP-FAX board, NSS signal does not assign Oki high speed protocol B even though NSF signal assigns it.

13.2.2.2 Receiving

1. In case of communication by IP-FAX board, NSF signal does not assign Oki high speed protocol B.

13.2.3 NSF RMCS Bit

At the time of NSF sending, it is sent with RMCS bit: OFF.

13.3 Timer at the time of IP-FAX board communication

13.3.1 Sending

13.3.1.1 Re-send timer after TCF signal was sent

1. In case of 14.4K, 12.0K, 9.6K or 7.2K of V.17, it is 7.1 seconds.
2. In case of 9.6K and 7.2K of V.29, and it is with Echo tone, it is 5.96 seconds. Without echo tone, it is 5.76 seconds.
3. In case of 4.8K, it is 6.4 seconds.
4. In case of 2.4K, it is 6.64 seconds.

Note) The above timer values depend on re-send timer (3 seconds) + Preamble time at the time of DCS signal send (1 second) + TCF signal time (Tr + 1.5 seconds)

Tr time is as follows according to V recommendation
V.17 : 1593ms
V.29 : 253ms (Without echo tone)
: 453ms With echo tone
V.27 : 908ms (4800BPS)
: 1143ms (2400BPS)

13.3.1.2 Re-send timer in cases other than the above TCF signal send

1. Uniformly, it is 4 seconds. (Re-send timer (3 seconds) + preamble time at the time of each signal send (1 second))

13.3.2 Receiving

13.3.2.1 The following timer is deleted at the time of IP-FAX board communication

1. Time between line hook-up and CED signal sending start
2. Time between CED signal sending to DIS signal sending start

13.3.2.2 Preamble sending timer

1. Delete timer at the time of IP-MAX communication. (It is 1 second as usual, in case of communication at the modem speed of IP-FAX board communication.)

13.3.2.3 ITU-T recommendation T2 timer

1. T2 timer after EOM receive is seven seconds. (T2 after EOM (6 second) + preamble time (1 second))
2. T2 timer in ECM communication is 19 seconds. (ECM T2 (18 seconds) + preamble time (1 second))
3. Other than above, (except V.34 communication), T2 timer = T2 TIMER setting by a service man + 1 second

13.3.2.4 ITU-T recommendation T4 timer

1 In case of automatic receive (except V.34), it is 4.3 seconds. (T4 (3.3 seconds) + pre amble time (1 second))

13.4 Communication service

13.4.1 Confidential reception service

1. Currently confidential reception puts priority to Non-Oki machine communication (communication by SUB signal), but Oki machine confidential reception will come first if IP FAX communication by NSF signal is set and Oki machine confidential reception is available.

13.4.2 Service code

1. When network is cut, a service code 9092 is newly added. At this time, communication result is an error, and the Alarm LED will light.

14. IPFAX board specifications

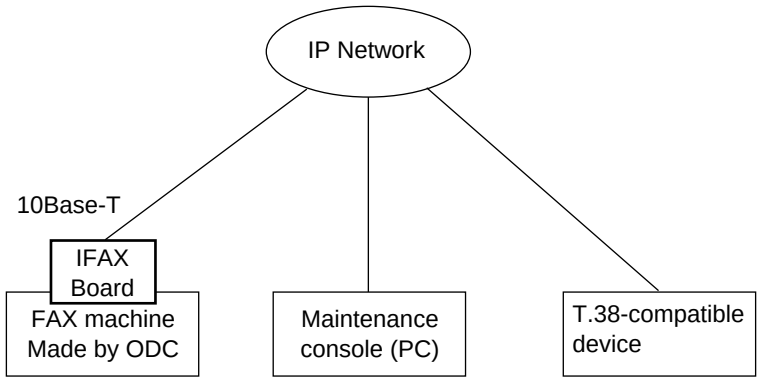
14.1 Outline

14.1.1 Outline of functions

You insert this board into MUPIS slot of a FAX machine made by ODC. FAX communication is done via network I/F and real time Internet FAX communication protocol is used (ITU-T T.38). When you insert this board to a slot of a FAX machine, the FAX machine can have real time Fax communication with a Internet FAX machine which is connected to the same IP network. Also, by communicating with maintenance console software in PC which is connected to IP network, program renewal and setting of this board is available.

14.1.2 System composition

Insert this board into a FAX machine made by ODC. IFAX communication is available with other Internet FAX devices (IFAX board, etc.) via LAN-I/F.

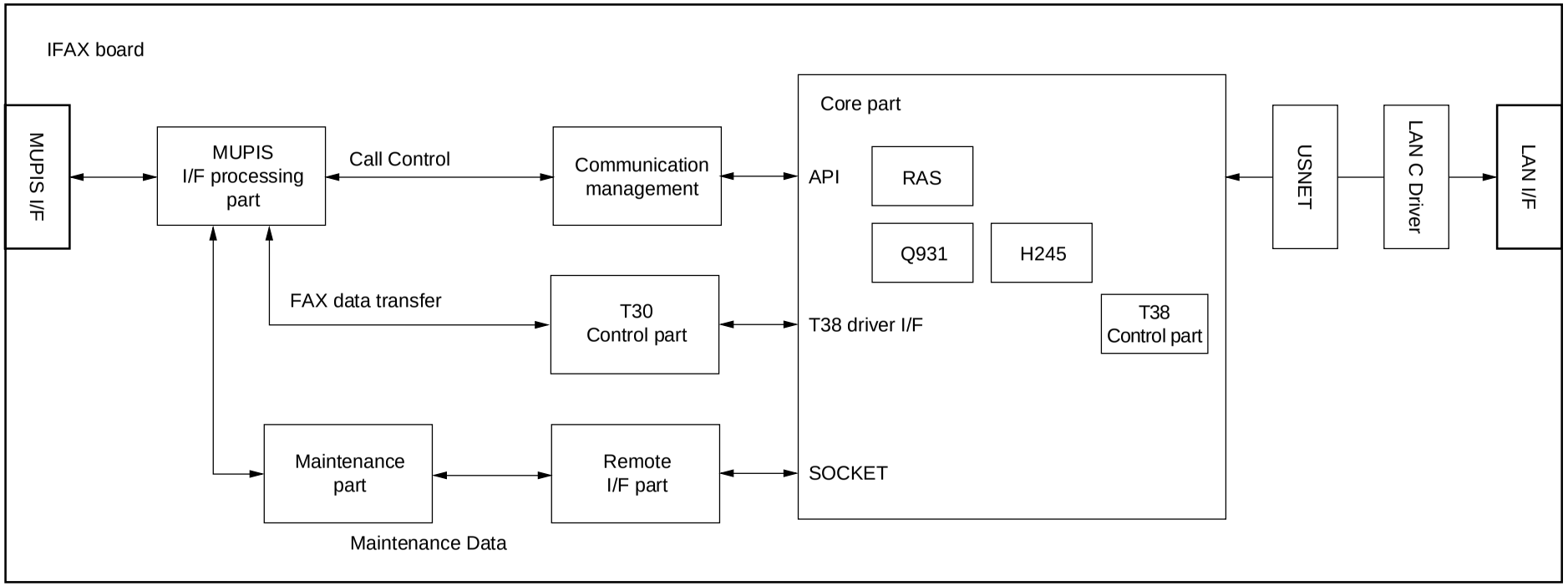


14.1.3 List of specifications

Category		Specifications	Remark
Network	Interface	LAN	
	The number of port	1	
	Layer 1, 2	10BASE-T	
Board interface	Layer 1	Original	Comply with MUPIS made by ODC
	Layer 2	Original	Defined in this spec.
	Procedure	Original	Defined in this spec.
Call control type	Protocol	TCP/IP,UDP/IP	
	Procedure	ITU-T H.323	
FAX communication type	Protocol	TCP/IP,UDP/IP	
	Procedure	ITU-T T.38	
Maintenance (setting, installation)	Protocol	TCP/IP	
	Procedure	Original	Defined in Console I/F specs.

14.2 Outline of Firmware specifications

14.2.1 Function block component

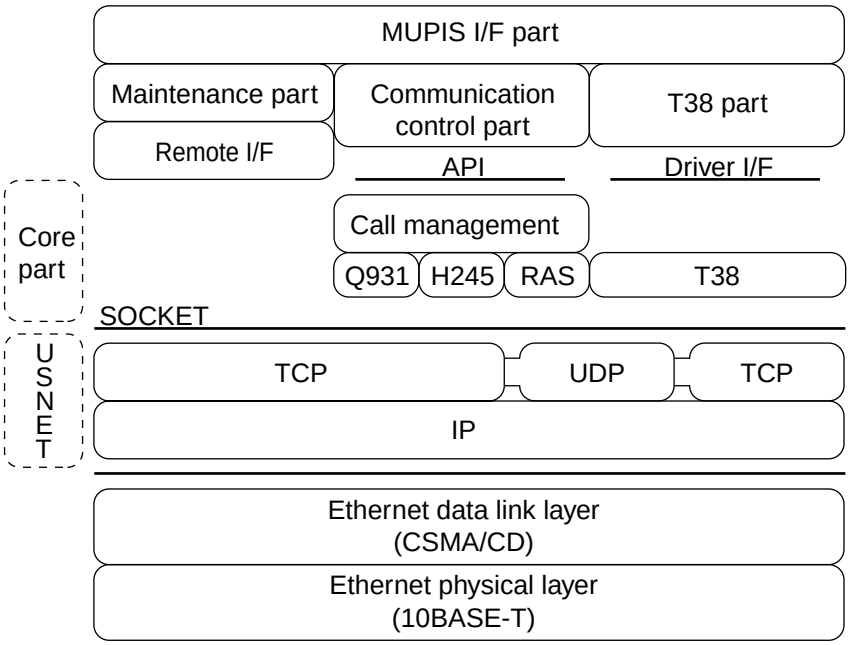


Function block

	Function block name	Function (outline)	Remark
1	MUPIS I/F processing part	Sends/receives messages and data with a FAX unit via MUPIS I/F. Handles all the messages and data between the main unit and the board.	
2	Communication management part	Controls sending from the main unit and controls receiving from LAN side using API in κ-LSI core part. Controls all core parts except FAX data.	
3	T30 control part	Sends and receives T30 signal between T38 part of ? and the main unit. (T30 protocol is installed in FAX main unit.)	How to decide MaxBitrate of the device?
4	Maintenance part	Renews firmware and modifies setting values from outside. There are two data paths: Network I/F and FAX main unit.	Currently, renewal from the main unit is not available.
5	Remote I/F part	Remote-connects with console software.	
	Core part	Does H323 call control, T38 logical channel open by H245, and T38 IFP packet communication.	
	USNET	Does TCP/IP communication.	
	LAN driver	LANC driver	

14.2.2 Protocol

14.2.2.1 Protocol stack



14.2.3 Working parameter

14.2.3.1 User setting values

Can be modified from Console software.

Setting items	Description	Default value	Remark
Host name	HOSTNAME in network I/F part	(none)	
Use of DHCP	Setting whether IP address is captured by DHCP	ON	Link with IP address
IP address	IP address in network I/F part	0.0.0.0	DHCP ON
Default gateway	GW IP address in network I/F part	255.255.255.255	DHCP ON
Subnet mask	Subnet mask of network I/F part	255.255.255.255	DHCP ON
TCP port number	The port number of the machine (TCP) • at the time of Q931 send, H245, T38	50000	Up to 50099 Toggle use
UDP port number	The port number of the machine (UDP) • RAS, T38	50100	Up to 50199 Toggle use
TCP port number for ringing	Port number for Q931 receiving of the machine to be registered in GK.	1720	
TCP port for maintenance	TCP port number for connection with maintenance console software	50200	
IP address for supporting NAT	Global address after NAT conversion	0.0.0.0	No conversion
Port number difference for supporting NAT	Port number difference after NAT conversion	0	
TCP handshake T.O value		30	
T38 transmission speed	Setting of T38 transmission speed Communicates within this speed range	1Mbps	MAX1Mbps
Alias address (E.164)	1 -32 characters available (can use 0-9, * and #)	2000	
Use GK/Not use GK	Selection if GK is used or not	Not used	
GK IP address	IP address when GK is used.	255.255.255.255	O:GK discovery
GK identifier	Identifier at the time of GK discovery	(None)	
GK connection UDP port number	UDP port number of GK side at the time of RAS communication	1719	
Give GK Alias	Captures from the machine setting/GK	The machine setting	
GK response time out value	Time out value of GK response to RAS message	RRQ:5sec URQ,ARQ,BRQ,DRQ,GRQ, :3sec	
Re-try number at the time of GK response T.O	Re-try number setting at the time of time-out of GK response to RAS message	URQ:1 RRQ,ARQ,BRQ,DRQ,GRQ, :2	
Address table	Address table when GK is not used (Alias, IP address, port number) For 100 cases	0 case	
Password setting	Character data of 1 - 32 characters For modification, a user has to enter twice by Console in order to prevent a mistake.	IPFAX	

14.2.3.2 Fixed values

Setting items	Description	Value	Remark
MAC address	MAC address of network I/F part	00:01:el:??:??:??	Set at Factory shipping

14.2.3.3 Setting at T.38 transmission speed

Transmission speed which is available for sending and receiving in the device is a set value. Used as MaxBitrate of sending/receiving T38 capability at the time of H.245 logical channel negotiation. Therefore, T38 connection transmission speed established by H.245 negotiation is decided within the setting range with a terminal of the other side. If the device on the other side sends faster than this transmission speed, this is violation of the recommendation, and correct communication cannot be guaranteed.
The sending process in T38 part of this board monitors the transmission speed, and adjusts so that the speed does not exceed the limitation.

14.2.4 Telephone number system

14.2.4.1 E.164 Alias address

Telephone numbers used when this unit calls, telephone numbers of address table, and telephone numbers to be registered in GK all uses E.164 alias address.
Available characters are 1 -32 characters which contain 0-9, * and #.

14.2.4.2 Sending performance

- When GK is used, GK solves address and connects to the other device using the telephone number that main unit instructs to call.
- When GK is not used, the telephone number that main unit instructs to call and the telephone number of address table are compared, and the number that has the longest match digit from the head of the telephone number is selected, and the IP address + port number are connected.
- If the head of the telephone number from the main unit is *, it is recognized as IP address entering regardless of “GK use/ GK not-use,” and IP address is directly sent (Send destination port number at the time of IP direct send is 1720- fixed.)

14.2.4.3 Number system

The following shows the restrictions of available number systems.
(1) Available Alias address is E. 164 Alias address.
(2) An Alias address: 1 - 32 characters (0- 9, * or #)
(3) A telephone number from the main unit without “*” at the head is recognized as an Alias address. If the head is “*,” it is recognized as an IP address.
Example) To send to 172.21.89.10, enter *172*21*89*10.

If the upper digits of device’s IP address and those of the send destination IP are the same, the digits can be omitted.
When device IP: 72.21.90.10, and send destination IP:
[*172*21]*89*10. [ ]part can be omitted.

Set Alias address and address table according to the number system of the system to which you implement the device.

14.2.5 Receiving control

- Only one FAX communication is available between the board and the main unit.
- Sending comes first.

14.2.5.1 Sending/receiving conflict

If the board receives a send instruction from the main unit after a receive notice, received call is cut, and send process starts.
Receiving during calling is not notified to the main unit and the board performs Busy-Cut.

14.2.5.2 Receiving during communication

Receiving during FAX communication is not notified to the main unit, and the board performs Busy-cut.

14.2.5.3 Multiple receiving

If multiple receiving from IP side happen simultaneously, only the first one is notified to the main unit. Others are not notified to the main unit, and are Busy-cut.